Time in Construction Contracts:

A Comparison of Selected General Conditions Provisions for Construction Contracts as Used by Various Public and Private Agencies

by

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A research report submitted in partial fulfillment

of the requirements for the degree of

Master of science in Civil Engineering

Department of Civil Engineering
University of Washington

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Abstract

A Comparison of Selected General Conditions Provisions for Construction Contracts as Used by Various Public and Private Agencies

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A research study was conducted to examine the methods being used by selected Federal agencies, State Departments of Transportation, and Cities to address time in their contract documents. The data for this study was obtained by review of construction contract general provisions as provided by the various contracting offices. This study examines the general conditions provisions of various owners, compares and analyzes each type of clause, and makes recommendations on fairness of the clause to both parties to the contract. The information derived from this study can be used as reference material by those agencies in the process of, or contemplating, revising their current contract documents concerned with time in construction contracting.

In presenting this research report in partial fulfillment of the requirements for the degree of Master of Science in Civil Engineering in the Department of Civil Engineering at the University of Washington, I agree that reproduction of any part of this report is allowable for scholarly purposes only. This is consistent with "fair use" as defined by the U. S. Copyright Law. All other reproductions for any other purposes shall not be allowed without my written permission.

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II. Introduction

The purpose of this research study is to present a comparison of the time related general conditions provisions contract clauses being used by selected federal, state, city and other agencies. These general conditions provisions clauses include those that relate to the time for performance of the contract and those that deal with actions required at specific points in time within a contract.

Most contracts are quite specific regarding the amount of construction time allowed to complete the work. This time constraint allows for finance planning, business and use planning, and ensures an appropriate performance effort by the contractor. Contract time may be expressed in terms of working days, calendar days or as a fixed completion date. The term "calendar days" includes Saturdays, Sundays and Holidays. "Working days" normally include any day that the contractor can work on the job but excludes Saturdays, Sundays and Holidays. Required actions and timeframes for performance are generally spelled out and the penalties for failure to meet these constraints are detailed.

Time is important in construction contracting. Typical contracts state that "time is of the essence". This is a statement by the owner that performance is expected within the proscribed period of time and that failure to complete the contract within the time allowed will result in damages to the owner. Many contracts provide for the payment of "liquidated damages" by the contractor to the owner for failure to complete on time or, in some cases, to complete portions of the work that interface with other contract schedules. Liquidated damages are a direct cost to the contractor and can have a major impact on the profit or loss on a particular contract. Indirect costs may also increase with elapsed time, including unanticipated overhead expenses, lower cash flows,

delayed revenues, and increased borrowing costs. The contractor may also experience a decrease in the firm's reputation within the industry and among clients. All of these factors can decrease the contractor's ability to obtain additional work and or remain in business.

The owner will also be affected by late completion of a contract. The owner may lose revenue, manufacturing service operations may be delayed, and other contracts may be adversely impacted. On a public works contract the public may be denied use of the facility, with the costs associated with lost use by the public being a major impact.

Within the contract documents, the general provisions or general conditions typically contain the various clauses related to the overall issue of time as administered in the contract. Clauses in the general provisions will define contract time and will state many different factors that can impact how contract time will be charged. Other clauses will state actions required of the contractor at specific points within or leading to the contract. The relationship between the contractor and the owner on issues of time will be governed by these clauses.

There are several major and minor contract clauses that affect contract time. These clauses include: Differing Site Conditions, Time Extensions, Claims/Disputes, Default, Prosecution and Progress, Suspensions, Historical/Archeological Preservation, and Termination for Convenience. Most aspects of how contract time will be controlled are contained in these clauses. Other clauses in the general conditions will also require actions by the contractor or owner at certain points in the flow of contract time. These include: Bid Modification/Withdrawal, Contract Award, Bid Guarantees, Failure to Return Signed Contract, Progress Schedules, Pre-construction Conference, Material Testing and Acceptance, and Failure to Maintain Project.

Many contractors do not spend enough time considering the contents of these clauses as they are not concerned about the general conditions provisions or "boiler plate" but only about the technical aspects of the job. Not all "boiler plate" is the same and unwary contractors can be in for some nasty surprises if they do not carefully read and understand the various clauses. The large and ever increasing volume of delay claims are to a large part resultant from a failure to understand and or follow the requirements of the various time provisions in the contract general conditions provisions.

The owner too must be aware of what clauses are contained in the general conditions of the contract. Some owners are not interested in dealing with increased cost or changes during construction and so try to limit the ability of the contractor to increase the price or time of a contract. These owners use restrictive language in their construction contract general conditions that limit change and flexibility. This type of contract is an attempt to limit the risk of the owner and reallocate most of the risk of construction to the contractor. Other owners are more receptive to sharing the risk and use less restrictive language in their general conditions. It is important for owners to understand that greater risk placed on the contractor results in an increase in the bid amount. Thus, if owners are willing to share the risks on construction projects, they can expect lower bids from the contractors. A contract that provides for shared risk typically also results in more of a team approach to the project as there is a greatly lessened adversarial relationship.

It can be seen that it is in the best interest of both parties to a construction contract that the work be completed within the schedule and on time. Many of the general conditions provisions deal with time and the uncertainty of the construction process.

The owner, in drafting the provisions, is proportioning risk with the contractor. Some owners are more willing than others to assume some of the risk in expectation of lower bid prices. This study will examine the general conditions provisions of various owners, compare and analyze each type of clause, and make recommendations on fairness of the clauses to both parties to the contract.

III. LITERATURE REVIEW

A. Introduction

A literature search revealed that the subject of time in construction contract documents has not been extensively studied. Much has been written on the subject of scheduling methods and techniques but almost nothing exists in the literature on how contract clauses that affect time can impact contracts. Much of the published material that could be found dealt in a general nature with the various contract clauses and claims avoidance or resolution.

B. General

Most construction contracts involve time as a key part of the contract. It is stated that "time is of the essence of the contract" or words of similar import. This signifies that the stipulated completion date or time is considered to be an essential part of the contract and an important part of the contractors obligation to the owner. Contractors who fail to complete the contract in the stipulated time will incur an indebtedness for damages incurred by the owner (Clough 1975).

Time in construction contracts is most often discussed in connection with scheduling. The contract documents may call for the contractor to use a specific type of schedule or may leave the choice up to the contractor. If no specific technique is specified in the contract, the contractor may chose between using a bar chart or a network schedule. Whatever the choice, the schedule should be submitted to the owner for review and approval even if not required by the contract documents. Submission of the schedule for approval notifies the owner of how the contractor intends to proceed with the work. Once approved, it is hoped that the owner will be able to cooperate with the contractor in achieving the planned schedule (McDonald and Baldwin 1989).

Claims litigation is often where the importance of time provisions are learned by contractors. In addition to the provisions that directly affect contract time, there are a number of notice and action provisions that require steps to be taken at specific points in time. Failure to provide a required notice or take a required action can result in a contractor losing entitlement to an otherwise valid claim. The contract documents must be carefully reviewed and all notice requirements noted. A contractor's failure to notify an owner of a differing site condition or of an entitlement to a time extension within the time parameters established by contract will result in the loss of compensation to the contractor. A contractor should make a check list of all notice requirements as a protection against waiver of claims (Medved February 1989).

In their paper, "Time and Weather Provisions in Construction Contracts of State Highway Agencies", Hinze and Couey looked at some of the general conditions clauses that deal with contract time. Their survey of the 50 State Highway Agencies (SHAs), looked at weather provisions, contract time definition, liquidated damages, and progress schedule requirements. It was determined that there was little consistency within the SHAs on their practices concerning time in their construction contracts. There was a great deal of variation in the amount of risk that each state was willing to take as part of the construction contract process. Many states assumed the risk associated with inclement weather while others placed this risk on the contractor. With all other factors being equal, it is expected that projects in states where more risk is passed to the contractor, the contractor's bids will also be higher.

Construction delays can be very costly to both the owner and the contractor. Delays can be caused by many factors and it is necessary to balance the risk between the parties of a contract. Many owners have tried to shift the risks associated with

construction to the contractor. Most construction contracts are adhesion contracts that are drawn by the owner and cannot be changed by the contractor. The owner drafts the general conditions provisions and determines the allocation of risk. Exculpatory clauses such as "Hold Harmless", "No Damage for Delays", and "Errors and Omissions" are used to shift risk to the contractor. Contractors are accustomed to risk taking. When presented harsh contract terms on the take it or leave it basis, common in most construction contract bidding, they add what is hoped to be a large enough contingency and hope for fair treatment by the owner. Improving contract language to more clearly and fairly allocate risk will result inimproved working relations and lower bids (National Research Council, 1978).

Construction delays are either excusable compensable, excusable noncompensable, or nonexcusable. A compensable delay allows one party to the contract to recover damages from the other. Delays caused by factors beyond the control of the contracting parties, such as acts of God, national emergencies, and sometimes unforeseen labor disputes, are typical examples of noncompensable delays. Neither the owner or the contractor can recover damages against the other for delays of this type. The contract general conditions must be carefully examined in order to determine the terms and definitions for each type of delay and the associated remedies (Medved, January 1989).

Most contracts by federal and state agencies do excuse some delays due to unsuitable weather. The relief granted to an contractor to a large extent depends on the definition of contract time contained in the contract. Many working day contracts will excuse the contractor from all delays due to inclement weather. Where contract time is defined as calendar days or by a fixed completion date, relief is normally only granted for unusually severe weather. In all cases it is up to the contractor to be aware of the

requirements and provide the proper documentation when requesting an extension of contract time. "Unusual" weather refers to conditions that are encountered with a greater frequency than could normally be assumed for the contract period. "Severe" weather refers to conditions that exceed an established norm. In order for contractors to establish a case for a time extension due to severe or unusual weather they must demonstrate, by use of historical data, that the weather encountered is beyond the expected norms for the period involved. This typically involves the collection and presentation of data from the national weather service (10 to 20 years of past data) that shows the norm for a given locale for given seasons (Isom, 1985).

C. References

1. Clough, Richard H., Construction Contracting, 3rd ed., (New York: Wiley 1975), pp. 126

2. McDonald, Phillip R. and Baldwin, George C., Builder's and Contractor's Handbook of Construction Claims, (New Jersey: Prentice Hall, 1989), pp. 131-135

3. Medved, George M., How to Win a Delay Claims Case, (Highway & Heavy Construction, v132 February 1989), pp. 40-43

4. Hinze, Jimmie and Couey, James E., Time and Weather Provisions in Construction Contracts of State Highway Agencies, (Paper No. 88 0477, Transportation Research Board, 1989), pp. 4-7

5. Exploratory Study on Responsibility, Liability, and Accountability for Risks in Construction, (The National Research Council, 1978) pp. 92-99

6. Medved, George M., How to Protect Yourself In Delay Claims Cases, (Highway & Heavy Construction, v132 January 1989), pp. 58-61

7. Isom, Sam, Weather delay time extensions: Contract Administration for Contractors, (Highway & Heavy Construction, v128 July 1985), pp. 41

IV. RESEARCH METHODOLOGY

A. Introduction

Results of a study done by James E. Couey in 1987 showed that there was significant variation in the way each State Highway Agency (SHA) addressed time in construction contracts. Couey had used a survey of the SHAs to obtain data for his study. Some states had included copies of their general conditions contract clauses with their responses to the survey. A review of the responses received, some of which indicated that perceptions varied from the provisions, indicated that variation in the SHAs general conditions would provide fertile ground for further study. This became the central theme for the study undertaken.

This study differed from Couey's study in two basic aspects. First, this study was broader in scope, covering all provisions that relate to time. Second, this study did not consist of information provided by survey respondents, but through the detailed examination of selected contract provisions as used by the SHAs. Copies of the general conditions provisions were requested from all 50 SHAs. General conditions provisions were also requested from a list of cities, federal and other agencies. The general conditions provisions of each agency, pertaining to time were then reviewed.

A direct review of the general conditions provisions was utilized vs interviews or surveys for several reasons:

1. Direct review of the provisions would allow for consistent treatment of the time provisions of each agency. One person would review all the provisions and the interpretation of the time provisions would be consistent.
2. In the time available for the study, a large number of agency construction contract general conditions provisions could be obtained.

3. Interviews or surveys provide data reflecting the perceptions of the person being interviewed or surveyed which may be different from the actual contract provisions.

B. Development of Contract Clause Checklist

After reviewing four sets of SHA general conditions provisions a checklist was developed to assist in tabulating the data. Each clause that impacted contract time or required contractor action at a point in time was noted. The time provisions on the checklist were listed in rough chronological order in the contracting process. The contracting process was followed from pre-award through default or final payment. The checklist was used for the review of each set of general conditions provisions. The checklist allowed the reviewer to make notations when a provision was similar to those of other agencies and it provided room for additional comments, such as unique aspects not included in the provisions of other agency documents. See figure 1 for a copy of the checklist used.

C. Provisions Checklist

Pre-award

How many Holidays? ___ List Unusual Days: Holidays to be recognized in the construction contracts were noted and any unusual days were listed. Unusual days were any days other than: New Years Day, Martin Luther King Day, Presidents Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Thanksgiving Day, and Christmas Day. The total number of recognized Holidays was listed as were the unusual days.

Adverse weather defined. Yes___ No___ : Did the provisions define adverse weather? Yes was checked only if the definition was clearly stated and the

Agency _____ Spec Date_____

How many Holidays? ____ List Unusual days:

Adverse Weather defined Yes____ No____
Withdraw/Modify bid any time prior to bid opening?_____ Other:
Contract to be awarded within ___ days after bid opening. Other:
Can contractor withdraw bid if not awarded within stated time? Yes____ No____
Bid Guarantees returned within ____ days after Bid Opening. No Mention _____
How long to return signed contract to agency? ____ Days.
NTP date? When Mailed ____ When Received_____ When Signed____ Other:
Contract Start Date:_____
Bid Guarantee forfeited if contract not received back by agency within ____ days? Yes__ No__
Bid difference forfeited if contract not received back by agency? Yes__ No__
Schedule due within ____ days after award. Other:

Schedule of prices due within ___ days after award.
Pre-construction conference required before start of work? Yes__ No__
Materials to be tested and approved prior to use? Yes__ No__
Winter exclusion period? Yes__ No__ Period_____
Contract time basis: Working day____ Calendar day___ Completion date___Combination___
May agency require no work on Sundays? Yes__ No__
May agency require no work on holidays? Yes__ No__
May agency require no work on day before or after holiday? Yes__ No__
Sunday or Holiday count as working day if worked? Yes__ No__
For working day basis who tracks time? _____ How often submitted for review?_____
Does basis include weather delays? Yes__ No__ How long to review and take exception?

How quickly must contractor respond to notice of inadequate maintenance of project?_____
Differing site conditions:
Adjustment to contract price for differing site condition? Yes__ No__
Notify owner prior to disturbing?_____ Request for additional compensation due when?____

Time Extensions: Time extensions Allowed Yes__ No__
When are requests for time extension due?_____
Extension for weather delay? Yes__ No__
Claims: Claims allowed? Yes__ No__ When must they be submitted?

Suspensions: Can agency suspend? Yes__ No__ Can contractor suspend? Yes__ No__
Suspension clause for historical or archaeological finds? Yes____ No____
What notice requirements?

Liquidated damages provided for late completion? Yes__ No__
Separate values for calendar day vs working or completion date? Yes__ No__
Defaults: How long does contractor have to respond to/or correct deficiencies prior to agency terminating contract?_____
Termination: Termination for convenience of agency? Yes__ No__ Restrictions?_____

After termination how long does surety have to take over work?_____
Payments: How often made?_____

Other:

Figure 1

determination was not left up to the engineer.

Withdraw/modify bid any time prior to bid opening?___ Other: This noted the use of a provision which would allow a contractor to modify or withdraw a submitted bid prior to the stipulated bid opening time.

Contract to be awarded within ___ days after bid opening. Other: This tracked how long agencies had to award contracts after the bids had been opened. Contractors could not withdraw their bids during this period. As this wording is generally fairly standard it was used instead of how long bids would remain valid. The clause where this information was contained also normally stated the conditions under which a contractor could withdraw a bid.

Can contractor withdraw bid if not awarded within stated time? Yes___ No___ : This noted if a contractor can withdraw a bid if the contract is not awarded within the stated time. If the answer is yes the clause limits an agency's ability to a guarantee of the bid price only for the stated period.

Bid guarantees returned within ___ days after bid opening. No Mention ___ : The number of days after bid opening that any required bid guarantees will be returned to other than the low contractor.

How long to return signed contract to agency? ___ Days : This tabulates the number of days that the contractor has to return the signed contract to the agency. This requirement is assumed to include the submission of the required bonds.

NTP date? When Mailed ___ When Received ___ When Signed___ Other: Information was collected to record the effective date of the Notice To Proceed.

Contract Start Date _____ : This is the date that the contract time starts to be charged. For liquidated damages to be avoided, the project must be completed

in the requisite time beginning with the contract start date.

Bid guarantee forfeited if contract not received back by agency within ___ days? Yes ___ No ___ : This shows the number of days the contractor has to return the signed contract to the agency. A yes response indicated that the contractor would forfeit the bid guarantee as liquidated damages if the contract and required bonds are not returned to the agency in the specified time.

Bid difference forfeited if contract not received back by agency? Yes ___ No ___ : A yes response to this question indicates that only the difference between the contractor's bid and the next low bid will be forfeited if the contractor fails to enter into the contract within the required time frame.

Post Award

Schedule due within ___ days after award. Other: This records the number of days after award the contractor has to submit a schedule. Any requirements other than a specific number of days, are also listed.

Scheduie of prices due within ___ days after award: This lists the number of days the contractor has to submit a schedule of values for payment purposes to the agency.

Pre-construction conference required before start of work Yes __ No ___ : A yes response to this question indicates that the contractor is required to meet with the agency prior to start of work.

Materiais to be tested and approved prior to use? Yes ___ No __ : A yes indicates that the agency requires all materials incorporated in the job to be tested and approved prior to their incorporation into the job. A no indicates that while testing

and inspection may be required it was not required prior to the materials being used.

Winter exclusion period? Yes __ No __ Period _____ : A yes indicates that the agency uses a winter exclusion period. If the agency uses an exclusion period, the included dates were recorded here.

Contract time basis: working day ___ calendar day ___ Completion date ___ Combination ___ : Defines what the agency uses as the basis of time in the contract clauses. Agencies can use working days only, calendar days only, a fixed completion date or any combination.

May the agency require no work on Sundays? Yes __ No __ : A yes response indicates that the agency can require that the contractor not perform contract work on Sundays.

May the agency require no work on holidays? Yes __ No __ : A yes response indicates that the agency can require that the contractor not perform contract work on holidays.

May the agency require no work on day before or after holiday? Yes __ No __ : A yes response indicates that the agency can require that the contractor not perform contract work on the day before or after a holiday. This has a greater impact on completion date and calendar day contracts.

Sunday or holiday count as working day if worked? Yes __ No __ : For working day contracts the agency may or may not charge a Sunday or holiday as a working day if the contractor works. A yes response indicates the agency does charge working days for any Sunday or holiday on which work is performed.

For working day basis who tracks time? _____ How often submitted for review? _____ : On working day contracts, this tracks whether

the contractor or agency keep track of contract time and how often that record of time charged against the contract is submitted to the other party for review.

Does basis include weather delays? Yes __ No __ : On working day contracts, the time charged as working days may exclude periods when the weather, or effects of recent weather, may prevent the contractor from working. A yes response to the question indicates that the agency does not charge working days when weather conditions prevent the contractor from working on the controlling items of work. A no response indicates the basis does not include weather delays and the contractor will be charged with working days during periods of adverse weather.

How long to review and take exception? : This tracks the time period the contractor has to respond to the agency log of working days report if exceptions are to be noted. If the contractor does not take exception, then the working days charged are agreed to.

How quickly must contractor respond to notice of inadequate maintenance of project? ____ Contracts may contain a requirement for the contractor to respond to an agency notification of inadequate maintenance. Adequate maintenance is defined as keeping the roadway and structures in satisfactory condition at all times including maintaining the previous course or subgrade during all construction operations. If this clause is present in the agency provisions, the time for the contractor to respond to the notice is noted.

Differing site conditions: If the contract contains a differing site conditions clause it is noted.

Adjustment to contract price for differing site condition? Yes __ No __ : This tracks whether the contract allows an adjustment to the contract price in

case of a differing site condition. While most of the time this adjustment would be under a differing site condition clause it may be under the changes clause if no differing site condition clause is used.

Request for additional compensation due when? ____ : Deadlines for submission of contractor proposals for adjustment to the contract due to differing site conditions are noted.

Time Extensions: Time extensions allowed Yes __ No __ : A yes response indicates time extensions are permitted under the contract.

When are requests for time extension due? _____ : Deadlines for the submission of contractor proposals for adjustment to the contract in contract time are noted.

Extension for weather delay? Yes __ No __ : This is a yes no listing for contracts that allowed full or partial relief from weather delays. Any special conditions were noted in the question regarding the allowance of time extensions.

Claims: Claims allowed? Yes __ No __ : When must they be submitted? If the contract allowed claims by the contractor for disputed work or interference by the agency a yes is checked. Any submission deadlines are noted.

Suspensions: Can agency suspend? Yes __ No __ : Yes is checked if the agency can suspend the contract.

Can contractor suspend? Yes __ No __ : This lists whether the contractor can suspend work on the contract.

Suspension clause for historical or archeological finds? Yes __ No __ : Records the presence of a provision requiring suspension of work due to historical or archeologist finds. Any notice or compensation request time frames were

noted.

What notice requirements? This allows listing of what notice the contractor is required to give to the agency if the contractor feels the contract has been suspended by an act of the agency. The time frame for submission of any request for adjustment to the contract for suspension is also listed.

Liquidated damages provided for late completion? Yes __ No __ : If the provisions contain a liquidated damages clause the yes is checked.

Separate values for calendar day vs working day or completion date? Yes __ No __ : This tracks those agencies that include different values of damages for working day vs other types of contracts.

The termination provisions in a contract can be either termination for convenience or termination for default or may contain both types of provisions.

Termination: Termination for convenience of agency? Yes__ No _ : This tracks those agencies that include a termination for convenience clause in their provisions.

How long does contractor have to respond to/or correct deficiencies prior to agency terminating contract _____ : This lists the notice requirements of those agencies that include a termination for default clause in their provisions.

After termination how long does surety have to take over work? This tracks response time frames in agencies where the surety is given additional notice prior to the agency terminating the sureties right to perform for a defaulted contractor.

Payments: How often made? _____ How fast will payment be made? The frequency of progress payments is listed and any statement on how fast the payment

would be made is noted.

D. Scope

Agencies selected for review were all 50 State Highway Agencies, a cross section of 13 medium to large cities, the Federal Bureau of Reclamation, the U.S. Navy and the standard form adopted by the American Institute of Architects (AIA). These agencies were selected because of the large volume of construction they administer each year using their construction contract general conditions provisions. With the exception of the AIA, all the agencies are public agencies and the general conditions provisions reviewed apply to competitive bidding. The AIA standard documents were added to this list because more contracts are awarded using the AIA documents than any other standard form.

E. Objective

The objective of this review was to obtain an in depth comparison of the clauses used by the agencies. The checklist assisted in tabulation of the data and noted the variations that warranted further analysis. Couey's study had indicated that there were differences between agency practices, as stated by interviews, and the requirements actually contained in the provisions. Direct review of the agency provisions allowed the collection of data without discrepancies between agency practices and actual documents. Trends in clause use could be identified and typical clauses listed for use as reference material.

F. Sample

Within the Federal Government all agencies must use the Federal Acquisition Regulations (FAR) for procurement of construction. Under these regulations the FAR clauses cannot be changed from agency to agency. Each federal agency is permitted to

develop and use their its own supplemental conditions to tailor the contract to the construction requirements of the agency. It can be assumed that construction contracts within the federal agencies are fairly consistent in the wording of the supplemental clauses. For the State Highway Agencies each state has developed its own contract clauses. The only common contact for all SHAs is the Federal Highway Administration. Some requirements are mandated for use by states as a result of accepting federal money. Variations of practices within a state exist but it is again assumed that the practices of districts within a particular state are fairly consistent. By reviewing general conditions provisions from all 50 states, the study would be a complete analysis of all SHA provisions.

For the cities, each city functions in an independent fashion. There may be some contact with the SHA in which the city is located but it was expected that there would be much more variation in the wording of time provisions. The sample size need be only large enough to illustrate some of the clauses variations used by cities.

The AIA general conditions provisions are in standard use across the country. The same provisions may be used in Alaska, Florida or Hawaii. The documents are the same regardless where used. It is this universal use which makes its review important when looking at time provisions.

V. Analysis of General Conditions Provisions

A. Data Analysis

Each set of general conditions was reviewed in detail. Provisions dealing with time were noted and data transferred to the contract checklist that had been developed. Information on each item on the contract checklist was then transferred to a spreadsheet where the data from each agency was logged. The spreadsheets were then used to tabulate the data for each checklist item. Additional written comments on the checklists are used where appropriate in the written discussion on each of the items from the checklist. The tabulations of the agency data were separated between the SHAs and the remaining agencies since it was desirous to look at the SHAs as a separate group. Trends and differences in the tabulated data were highlighted for further analysis and presentation in the detailed discussion of each checklist item. The spreadsheet logs are included as appendix A for the SHAs and appendix B for the other agencies. The logs may be reviewed to determine each agencies position on individual items on the checklists.

Detailed statistical analysis was not warranted as it was important only to note the agency trends and variations for further analysis. Detailed statistical analysis would not be significant.

VI. Research Results

A. General

The results of each item in the contract checklist will be presented in rough chronological order in the life of a contract when the provisions would most apply. Items dealing with pre-award will be presented before post-award items. For major clauses, each item will be introduced, results will be presented (including example provisions), impacts of the provisions bill be given with conclusions stated. Items relating to major clauses will be presented together. Clause names used as headings are representative of the information contained in the various agency clauses although titles used by the agencies may be somewhat different. Review of each agency's position on each item presented can be found in tabulated form the appendices. Appendix A has the spreadsheets used for tabulation of the SHA data while Appendix B contains the spreadsheets used for tabulation of the other agency data.

B. Definitions and Pre-award Clauses

Holidays

Introduction

While contractors may all be familiar with the holidays observed in their present place of residence and work, the nature of construction is that the location of the work varies. It is not unusual for contractors to bid on work in locations where the company is not familiar with the agency they will be working for. A contractor who reviews a potential job before preparing a schedule must be aware of the holidays observed by the agency. Holidays observed by states may be different from cities within the state and they may differ from state to state. Table 1 is a summary of holidays as found in the review.

Table 1: Are holidays listed in the provisions and if so, how many holidays does the agency observe?

Agency	Not Listed	8	9	10	11	12	13	14	Other
SHAs	22	2	6	5	7	3	2	2	
Cities	10		1	1					1
BLM	X								
Navy	X								
AIA	X								

SHAs

Many states indicate the number and specific dates of holidays they will observe. The holidays observed by particular states were most often found in the definition section of the general conditions provision. Others were found in the section dealing with prosecution and progress of the work. Slightly more than half of the SHAs list their holidays in the specifications. The remainder observed holidays as set forth in state law. It can be seen that there is a significant variation in the number of holidays observed by each agency. The specific holidays themselves are of interest. Some of the variation is regional while some states have unique days they observe. Most states observe the nine Federal holidays: New Years Day, Martin Luther King Day, Presidents Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Thanksgiving Day, and Christmas Day. Many of the Southern SHAs observe Robert E. Lee's Birthday, Confederate Memorial Day and Jefferson Davis's Birthday. Good Friday, election day, and the day after Thanksgiving are also popular holidays. Many of the other differences reflect important events within the states, e. g., Benningston Battle Day in Vermont, West Virginia Day in West Virginia, and Stewards Day in Alaska.

Other Agencies

Most of the other agencies do not list observed holidays. Good Friday observed by Chicago and the day after Thanksgiving observed by El Paso were the only non typical days listed. The Federal agencies observe the nine holidays listed above. Holidays are not listed in the basic AIA document.

Impact and Conclusions

Holidays vary widely between agencies. While uniformity in observed holidays is seemingly not important, it is important for agencies to recognize that contractors may

not be familiar with the agency or the impact that different agency holidays may have on contractors. Contractors may be required to pay workers for time off on many of the listed holidays. Inspectors and engineers may not be available if the contractor elects to work on a holiday. In some cases the contractor will be prohibited from working on listed holidays. If not prepared for these conditions a contractor can find a projected schedule costly to meet.

Modification and Withdrawal of Bids

Introduction

The preparation and submission of a bid by a contractor is a very complex task. Quotes from many subcontractors and material suppliers may not be submitted to the contractor bidding on a project until shortly before the bid submittal time. The use of spreadsheet programs to compile bids has reduced the probability of errors in the arithmetic of the bid process but still many unknowns remain unresolved until shortly before bid submittal. As a consequence of this process, contractors may submit bids that are based on assumptions or approximations of the quotes they will receive from subcontractors and suppliers. As the actual quotes are received, the bids become more exact. With the time necessary to finalize a bid often being very short, contractors may submit bids with contingencies to cover the unknown quotes. If a contract contains a provision allowing withdrawal or modification of the contractor proposals, the contractor can ensure a bid is submitted and then revise or withdraw it if necessary. The results displayed in Table 2 show the usage of a provision allowing modification or withdrawal of bids.

SHAs

Most SHAs include provisions allowing contractors to modify or withdraw bids. There is a great deal of similarity in the wording of the provisions with some provisions allowing telegraphic modifications and others limiting modifications or withdrawals to written requests. The provision used by the state of Mississippi is typical of the clauses used. The clause states:

Table 2: May the contractor Withdraw or Modify a bid any time prior to bid opening?

Agency	Yes	No	No Mention
SHAs	47	3 *	
Cities	8		5
BLM	X		
Navy	X		
AIA			X

* New York, Pennsylvania, Rhode Island

Withdrawal or Revision of Proposals (102.10 Mississippi)

> A bidder may withdraw or revise a proposal after it has been deposited with the Department, provided the request for such withdrawal or revision is received by the Director, in writing or by telegram, before the time set for opening of proposals.

Other SHA's include additional wording that allows a contractor to withdraw unopened proposals, after the time set for bid opening, where if bids have been submitted on multiple projects all opening at the same time. If the contractor is the apparent low bidder on one of the project, the contractor can withdraw any unopened bids on other projects that have bids opening at that time. Of the three SHAs that do not allow bids to be modified any time prior to bid opening, Rhode Island will accept modifications or requests for modifications up to two hours prior to bid opening. New York will not allow a bid to be modified or withdrawn once the bid has been submitted. Pennsylvania will accept modifications or requests for modifications up to 9 AM of the day bids are to be opened.

Other Agencies

Provisions used by other agencies are similar to those used by the majority of the SHAs. As can be seen in Table 2, some agencies do not have a provision that deals with withdrawal or modification of bids.

Impact and Conclusions

Contractors are more likely to bid and be timely with their bids if solicitations contain provisions allowing for withdrawal or modification of bids. If a mistake is made and discovered prior to bid opening or a contractor feels too uncomfortable with an assumption made in the bid process it can be changed or withdrawn. Allowing contractors to withdraw or modify bids prior to the opening of any bids increases the comfort a contractor has with the bid process. This will reduce contingencies in bids

submitted and should result in increased bidding. The agency will therefore receive the benefit of greater competition and should get lower prices.

Award and Execution of Contract

Introduction

General conditions provisions dealing with the award and execution of a contract typically state either how long the contractors bids will remain open or how long after bid opening the agency has to award the contract. Initial review showed that most of the states used language similar to the second wording. Regardless of the wording, what is important is how long the contractors bid is good for.

Contract time will start sometime after award and the number of days for completion is stated in the solicitation. Contractors must account for the time between submission of bids and award of the contract. Labor, material and equipment costs can change with time so it is important for the contractor to know how long after bid opening the contract can be awarded. It is not fair to ask the contractor to carry the risk of changing costs for an indefinite period. The time after bid opening if therefore frequently fixed so that the risk can be identified. Time for award of the contract after bid opening is shown in Table 3. Many agencies that have a fixed time for award also allow the contractor to withdraw a bid if award is not made in this fixed period. The number of agencies that allow the contractor to withdraw bids if the contract is not awarded in the stated period is presented in Table 4.

SHAs

Time for award varies between the most 30 and 60 days with half the SHAs awarding contracts within 30 days. Up to sixty days is not an unreasonable amount of time to keep a contractor waiting for award of a contract. Most provisions used are similar most states will allow a contractor to withdraw a bid if the contract cannot be awarded within the stated period. The provision used by the state of Illinois is typical.

Table 3: How long after bid opening can the agency award the contract?

Agency	30 Days	40 Days	45 Days	50 Days	60 Days	90 Days	Not Listed or Other
SHAs	26	2	9	1	7		5
Cities		1	1		3	1	8
BLM					X		
Navy					X		
AIA							X

Table 4: Can the contractor withdraw a bid if the contract award is not made in the stated time?

Agency	Yes	No	No Mention
SHAs	37		13
Cities	2		11
BLM	X		
Navy	X		
AIA			X

The clause states:

Award of Contract (103.02 Illinois)

> The award of contract will be made within 45 calendar days after the opening of proposals to the lowest responsible and qualified bidder whose proposal complies with all the requirements prescribed. The successful bidder will be notified by letter that his/her bid has been accepted, and that he/she has been awarded the contract.
>
> If a contract is not awarded within 45 days after the opening of proposals, bidders may file a written request with the Department for the withdrawal of their bid, and the Department will permit such withdrawal.

Of the SHAs that do not specifically allow the contractor to withdraw a bid if award is not made in the stated time, it is expected that the instructions to bidders on an individual contract solicitation would contain information on how long the agency has to award a contract or how long bids must remain open.

Other agencies

Most cities do not state either the time to award a the contract or whether the contractor can withdraw a bid if no award is made. As stated for the SHAs this information would most likely be found in the instructions to bidders in individual solicitations. The two federal agencies require bids to be open for 60 days vs the more common time of 30 days used by most of the SHAs. First hand experience by the author indicates that the larger federal agencies require more time to evaluate proposals and make award. Since most SHAs pre-qualify bidders and the federal agencies do not, this is not surprising. There is very little information on bidding in the AIA document.

Impact and Conclusions

Price quotes from material suppliers and subcontractors are subject to change with time. In periods of economic change prices can go up or down in a short span of time. The contractor can manage costs over time associated with the completion of the

contract but is at the mercy of the agency until the contract is awarded. Only one agency held contractor bids open for more than 60 days. Things can change so fast in the economy that 60 days is probably the upper limit of what is fair and reasonable. The longer the agency has to award a contract after bid opening, the more costs for contingencies the contractor must include in the bid. Prompt and speedy award of contracts can allow the contractor to lock in material and subcontract prices. Using shorter times for award an agency runs the risk of not being able to award the contract prior to bids expiring. On the contractors side a shorter time for award means the contractor is more likely to reduce or eliminate contingencies since costs can be fixed with subs and suppliers. An agency willing to push for quick action on award can realize a price savings on construction awards.

Proposal Guaranties

Introduction

Most agencies that use competitive bidding procedures require each bidder to submit a proposal guaranty with the bid. The guaranty is usually in an amount of 5% to 20% of the contractors bid. The purpose of this guaranty or bid bond is to ensure that the low responsible bidder enters into a contract with the agency upon award and furnishes the required payment and performance bonds. The agency usually specifies the guaranty may be in the form of a certified check, cashier's check, or in the form of a bid bond on forms acceptable to the agency. The guaranty is returned to the unsuccessful bidders at some point in time as stated in the provisions. Timeframes for returning of bid guaranties are presented in Table 5.

The apparent low bidder is notified of the intent to award and forwarded a contract and bond forms to fill out. The provisions will state a period of time in which the contractor must complete the bonds, and return them with the signed contract to the agency. If the contractor fails to enter into the contract or fails to return it in the specified time, the agency may make claim upon the bid guaranty. The claim on the guaranty may be either a forfeiture of the guaranty as liquidated damages or forfeiture of the difference between the low and second low bid. The time in which to return the signed contract is presented in Table 6. Consequences of failure to return the contract in the required time are presented in Table 7.

SHAs

All SHA'a require bidders to provide a bid guaranty with a bid. Time frames stated for their return varied from immediately after bid opening to after award of the contract. Guaranties of the two or three low bidders are retained until after award in all

Table 5: How soon after award are bid guaranties of unsuccessful bidders returned?

Agency	After award	After bid opening	3 Days After bid opening	10 Days After bid opening	15 Days After bid opening	Only checks returned	Other	Not Stated
SHAs	9	14	2	2	2	8	8	5
Cities	4	2		1		1	1	4
BLM	X							
Navy	X							
AIA								X

Table 6: How long does the contractor have to return the signed contract to the agency?

Agency	8 Days	10 Days	15 Days	20 Days	30 Days	Other	Not Listed
SHAs	1	16	19	8		3	3 *
Cities		8			1	3	1
BLM			X				
Navy			X				
AIA							X

* Indiana, Nevada, Ohio

Table 7: What is forfeited if the contractor does not return the signed contract within the required number of days?

Agency	Bid Guarantee Forfeited as LD's	Bid Difference Forfeited	No Mention	Other
SHAs	47	1 *	2 * *	
Cities	11		2	
BLM		X		
Navy		X		
AIA			X	

* Alabama

** Indiana, Nevada

cases. Of all the agencies reviewed, only New York State required a certified or cashier's check and would not accept a bid bond. The provision from Arizona is typical of those agencies that only return checks.

Return of Proposal Guaranty (103.04 Arizona)

> Proposal guaranties in the form of certified or cashiers checks will be returned immediately following the opening and checking of proposals, except that of the lowest qualified bidder; however, the Department may also retain the proposal guaranty of the second lowest qualified bidder at its discretion. Proposal guaranties in the form of certified or cashier's checks that have been retained will be returned promptly upon completion of both of the following actions: Award of the contract; the filing with the Department of satisfactory bond and contract forms executed by the bidder.

The provision from Texas is representative of those agencies that will return guaranties some time after bid opening.

Return of Proposal Guaranty (3.3 Texas)

> The proposal guaranty of the three lowest bidders may be retained until after the contract has been awarded, executed, and bonds made. Proposal guaranty [sic] of all except the three lowest bidders will be returned within 72 hours after the bids are opened.

Most SHAs require the signed contract be returned to the agency within 15 days of the notice of the award of the contract as shown in Table 6. The agencies are fairly consistent in the time they give a contractor to obtain bonds and return the signed contract. There is very little variation in the wording of the provisions used. The provisions of Wisconsin, presented below, illustrate the key points of the provisions:

Execution of the Contract (103.6 Wisconsin)

> The contract shall be executed by the bidder, and the contract bond shall be executed by the principal and the sureties, and both shall be presented to the Administrator within 15 days after the date of notice of the award of the contract...

Failure to Execute the Contract (103.7 Wisconsin)

> Failure on the part of the successful bidder to supply any information requested in the special provisions and to execute a contract and an acceptable contract bond, as provided in Subsection 103.06 within 15 days after the date of notice of the award of the contract will, at the discretion of the Administrator, be just cause for the annulment of the award and the forfeiture of the proposal guaranty to the State, not as a penalty but in payment of liquidated damages sustained as a result of such failure.

Alabama is the only state in which a low bidder who fails to enter into a contract forfeits the difference between the low and second low bids. The Alabama clause, 103.08 states:

Failure to Execute Contract (103.08 Alabama)

> Should the successful bidder or bidders to whom the contract is awarded fail to execute a contract and furnish acceptable contract security as provided by Articles 103.05, 103.06, and 103.7, the Director shall retain from the proposal guaranty if it be a certified check or recover from the principal or the sureties if the guaranty be a bid bond, the difference between the amount of the contract as awarded and the amount of the proposal of the next lowest responsible bidder but not to exceed the total amount of the proposal guaranty shall be so retained or recovered as liquidated damages for such default. Any sums so retained or recovered shall be the property of the State. In the event of the death of the successful bidder (if an individual and not a partnership or corporation) between the date of the opening of the bids and the 10 days following the date of award of the contract as allowed in Articles 103.05 and 103.06 for furnishing contract security and executing contract, the Director will return the proposal guaranty intact to the estate of the deceased successful bidder.
>
> When the successful bidder or bidders fail to execute a contract, and the contract is awarded to the next lowest bidder, the original low bidder will be prohibited from doing any work on the contract, either as a subcontractor or in any other capacity. The original low bidder will also be prohibited from bidding on the project if it is readvertised for letting. These restrictions shall apply to any other name under which the same person, individual, partnership, company, firm, corporation, association, cooperative, or other legal entity may be operating in which the principal owners are involved.
>
> Failure by the Department to return to the successful bidder his approved contract and to issue a work order as required by law shall be just cause, unless both parties agree in writing to a stipulated extension in time for

issuance of a work order, for the successful bidder to withdraw his bid, contract, and bonds, without forfeiture of certified check or bid bond.

In this clause, the SHA can also bar the contractor from working on a contract in any capacity if it does not enter into a contract. Some of the other SHAs have similar provisions.

Other Agencies

The provisions of the cities are all similar to the majority of those used by the SHAs. As confirmed by Table 7 most cities will collect the bid guaranty as liquidated damages if the contractor will not enter into a contract with the city. Provisions for time to return the contract to the agency and time to return bid guaranties are also quite similar. The federal agencies use provisions similar to Alabama in that they only collect the bid difference between the low and second low bidder in the case of a failure to enter into a contract. Provisions prohibiting defaulting bidders from working on a contract if readvertised are also the same. The AIA documents are silent on bid guaranties.

Impact and Conclusions

The time the agency holds bid guaranties prior to returning them only has an impact on the contractor if a bid bond is not used. The time value of the money locked up in a certified check or cashier's check will increase a contractor's bid. The cost for a bid bond is typically included in the cost of performance and payment bonds. If a contractor does not get the low bid then there is typically no cost for the bid bond. From an agency standpoint, recovery of funds from a bond may appear more difficult than from a certified check. Insistence on checks instead of allowing bonds results in higher bids. An agency must balance the prospect of collection difficulties with the benefits of reduced bids. If the number of bidders that fail to enter into contracts is small, then the effect of lower bids would be considerable.

Notice to Proceed and Contract Start Date

Introduction

After the contractor has returned the signed contract, the agency may notify the contractor to proceed with the work with a Notice to Proceed (NTP). The notice to the contractor may be called either a notice of award or a notice to proceed but has the same effect. It notifies the contractor of the decision to award and gives the terms under which the contract time will start. Most states indicate in their provisions that the award of the contract is not effective until the contract has been executed by all parties. Execution by the agency, which follows the execution by the contractor, may require several weeks so the NTP frequently starts the contract time clock for the project. The effective date of the NTP may be when mailed, when received or when signed. The contract start date may be stated in the NTP or may automatically begin a stipulated number of days after the NTP. Finally, some agencies define the contract start date as the date the contract is executed by all parties. The provisions were reviewed in regard to the effective dates of NTPs used by agencies (see Table 8). Agency practices on contract start dates are presented in Table 9.

SHAs

The effective date of the Notice to Proceed for most SHAs is the date the NTP is signed by the agency. Contract start date is most often stated in the NTP. Although there is considerable variation between states, the provisions used by Connecticut are typical for those states that use the NTP to define the contract start date.

Notice to Proceed (1.03.08 Connecticut)

> The contractor will be bound to the performance of the contract when given notice to proceed with the work on April 1 or no later than 45 calendar days after the date of execution of the contract by the contractor

Table 8: What is the effective date of the Notice to Proceed (NTP)?

Agency	When Mailed	When Received	When Signed	Not Stated
SHAs	9	4	32	5
Cities	2		6	5
BLM	X			
Navy	X			
AIA				X

Table 9: How is the contract start date defined as?

Agency	As stated in NTP	10 Days after NTP	15 Days after NTP	30 Days after NTP	When Signed	Other
SHAs	25	4	5	1	9	6
Cities	9	2		1		1
BLM			X			
Navy			X			
AIA	X					

or the deposition of the performance contract bond and payment bond, whichever is last...

Start of Work (1.08.02 Connecticut)

The Notice to Proceed issued to the contractor by the commissioner or his authorized representative will stipulate the date on which it is expected that the contractor will begin construction and from which date contract time will be charged. In no case, however, shall the contractor begin work prior to the date stipulated in the Notice to Proceed.

Other Agencies

Usage of NTPs by the cities is similar to the usage by the states except very few of the cities define the effective date of the NTP. Rather, the contract start date is defined in the NTP. The federal agencies define the date of the NTP as the date when mailed. The NTP is a notice of award and is mailed while awaiting the contractor submission of bonds and return of the signed contract. Contract start date is 15 days after the date of the notice of award. The AIA provides for the contract start date to be given in the notice to proceed to the contractor.

Impact and Conclusions

The use of a NTP allows the contractor to start to organize the project and implement the plan for construction while awaiting the signed contract. In most cases the receipt of the NTP obligates the agency to the contract and the contractor is expected to begin the work. Establishment of the contract start date is important as time charges begin at that point. Agency use of NTPs and the establishment of contract start dates vary considerably but this is understandable when the type of time charges used by agencies are reviewed. Agency location, expected weather and contract type are all factors that the agency must consider when setting the start date of the contract. Contractors must carefully review the provisions to know when to anticipate the construction effort to begin.

C. Post Award Clauses

Schedule and Pre-construction Conference Requirements

Introduction

In most contracts, immediately after the provisions concerning the award of the contract, several requirements are imposed on the contractor for submissions to and meetings with the agency. Most agencies require that the contractor submit a schedule showing the sequence of activities for performing the work. Often the schedule must be provided to the agency at or prior to a pre-construction conference where contract administration and project planning and interaction are discussed. Required schedules can be fairly simple or very detailed. The type of schedule required is outside the scope of this study; however, the time frame of any required submission is of interest. Required time frames for submission of project schedules are summarized in Table 10. If the schedule is submitted to the agency prior to any required pre-construction conference, the agency has time to review the schedule and can be prepared to discuss and or approve it at the conference. Requirements for a pre-construction conference are shown in Table 11.

SHAs

Most SHAs require a schedule although there is much variation on when it is required. Only 5 SHAs do not state the requirements for their schedule. The schedule clause from Illinois is typical of most SHAs.

Progress Schedule (108.02 Illinois)

> After award of the contract and prior to starting work, the Contractor shall submit to the Engineer a satisfactory progress schedule or critical path schedule which shall show the proposed sequence of work, and how the Contractor proposes to complete the various items of work within the number of working days set up in the contract or on or before the completion date specified in the contract.

Table 10: How soon must the contractor submit a project schedule?

Agency	Prior to starting work	At or prior to the Pre-Construction conference	10 Days after Award	15 Days after award	20 Days after award	30 Days after award	Other	Not Stated
SHAs	10	10	5	7	1	2	10	5
Cities	4			3			3	3
BLM				X				
Navy				X				
AIA							X	

The Table 11: Is a pre-construction conference required prior to start of work?

Agency	Yes	No
SHAs	27	23
Cities	5	8
BLM	X	
Navy	X	
AIA		X

This schedule shall be used as a basis for establishing the controlling item of construction operations and for checking the progress of the work. The controlling item shall be defined as the item which must be completed either partially or completely to permit continuation of progress. It shall be the responsibility of the Contractor to show the intended rate of production for each controlling item listed on the schedule during the period such item is controlling.

The contractor shall confer with the Engineer at regular intervals in regard to the prosecution of the work in accordance with the progress schedule or critical path schedule.

One of the more interesting schedule clauses is that used by the state of Mississippi. The Mississippi clause states:

Prosecution and Progress (108.03 Mississippi)

The Department will furnish the successful bidder a progress schedule developed in the determination of contract time. Such progress schedule may be used as the approved contract progress schedule or the successful bidder may submit for approval his own proposed progress schedule. The schedule will be in the form of a bar graph diagram indicating the various controlling phases of the work...

Here the state's schedule will become the approved schedule if the contractor elects to use it or fails to take action to provide one. Pre-construction conferences are required by about half of the SHAs. Clauses requiring a conference are all similar with the only variance being in the time for the conference. The clause used by South Carolina is one of the better examples. It states:

Pre-construction Conference **(108.02 South Carolina)**

After receipt of the notice of award and prior to the beginning of construction, the Engineer and the Contractor shall establish a mutually agreeable date on which a pre-construction conference will be held. The Contractor shall have present at the pre-construction conference the project superintendent, and other representatives or responsible officials who will be involved during the construction of the project, including representatives of any subcontractors. Officials of local county and municipal governments, representatives of affected utility companies and other affected agencies will be requested by the Engineer to attend in

order that a working understanding can be established, thus providing for the coordination of the work among the various parties and allowing the work to proceed with minimum delay.

The conference discussion of the project will include such matters as the Contractor's plans and schedules, right-of-way, agreements affecting the construction, compliance with permits which have been issued, unusual conditions, compliance with all applicable requirements such as erosion control, pollution controls and other pertinent items conducive to better progress and efficiency of operations. Construction pay items will be discussed so that all parties understand the type of materials required, the method of construction, and the method of measuring and paying for the items of work.

Other Agencies

Three of the thirteen cities do not state what submission requirements exist for schedules. Of those that do require schedules, clauses used by the cities are similar to those used by the SHAs. As with the SHAs, approximately half of the cities also require a pre-construction conference. Clauses again show little variation from the SHAs. Both federal agencies require schedules and pre-construction conferences while the AIA document only requires a schedule. The AIA clause requires that the schedule be submitted immediately upon award for the Architects approval.

Impact and Conclusions

The pre-construction conference provides a forum for the contractor and the agency to discuss administrative details and agree on the resolution of problems. While only about half the agencies require such meetings, contractors should insist on a pre-construction conference prior to the start of work. It is extremely important that both the contractor and the agency understand and agree on the administration of the contract between the two parties. This is also when the agency can inform the contractor of the relative importance of various work items. Relationships are defined at the conference and expectations can be more clearly stated. If the schedule is submitted for agency review prior to the conference, then the agency can provide comments and make the

contractor aware of problems while there is time to make changes to the schedule without delaying the project or adversely impacting the contractor. Failure to have a pre-construction conference puts both parties to the contract at greater risk for misunderstandings which lead to conflict and confrontations. Establishment of the contract team at an early date greatly reduces the likelihood of claims and disputes later in the project. If contractor and the agency are in agreement on the schedule, better cooperation in avoiding adverse impact to the schedule can be expected.

Materials Testing

Introduction

Prior to the contractor performing any actual construction work, most contracts require that the contractor submit materials for testing and approval. If the contractor proceeds to install any material without prior approval, the contractor may be required to remove the materials installed. The number of agencies that require materials to be tested and approved prior to incorporation into the work is presented in Table 12.

SHAs

As can be seen in Table 12, 47 of the SHAs require that materials be tested and approved prior to incorporation into the work. The 3 agencies that do not, do require that materials be tested and approved but the requirement is ongoing in the contract. Their provisions on material testing are similar to the other SHAs except there is no requirement for prior approval of materials and test results. The agency can test materials at any time and non-conforming materials must be removed. The clause used by Montana is typical of those states that require all materials to be tested prior to incorporation of the work. The clause states:

Samples, Tests, Cited Specifications (106.03 Montana)

> All materials will be inspected, tested, and accepted by the Engineer before incorporation into the work. Work in which untested and unaccepted materials are used without approval or written permission of the Engineer shall be performed at the Contractor's risk and may be considered as unacceptable and unauthorized and will not be paid for....

Other Agencies

Of all the other documents examined, only one city and the AIA require materials to be tested prior to the contractor using them. The other agencies require that materials comply with the specifications and testing be performed, but the requirement

Table 12: Must all materials be tested and inspected prior to incorporation in the work?

Agency	Yes	No
SHAs	47	3 *
Cities	1	12
BLM		X
Navy		X
AIA	X	

* Colorado, Nevada, Washington

is not prior to incorporation into the work.

Impact and Conclusions

Submission of materials and data for testing and approval can be a lengthy process. Agencies need to be aware of the testing requirements that are included in the contract when time for completion is determined. If the agency does not consider the time for processing submittals and testing of materials, the time given the contractor for completion may not be reasonable. Contractors need to check whether they can incorporate materials prior to testing when preparing a schedule and bidding on a project. A failure to acknowledge these requirements may result in the payment of liquidated damages at the end of the job.

Contract Time

Introduction

The definition of contract time varies among the agencies. Contract time may be defined in terms of calendar days, working days, or a fixed completion date. Many agencies use more than one type of accounting depending on the type, size and length of time for a contract. Most federal agencies use calendar days while most SHA's use working days. Table 13 presents the allocation of time for construction for the various agencies. The determination of the means of allocation of time charges depends on many factors. Time of year, geographic location, complexity of work are among the factors that must be considered. Time of year and geographic location are considered from a weather standpoint. Many states in northern and eastern locations use a winter exclusion period in their contracts. A winter exclusion period consists of a block of time during the winter months during which no contract time is consumed. Table 14 presents the number of agencies that use such a period.

SHAs

Thirty-two of the SHAs may use any of the three methods of allocating contract time. Eleven of the states do not use working days at all. Two states use working days only and two use calendar days only. Twenty-seven of the SHAs use a winter exclusion period. Most of these agencies are in the North and East where winter weather is more severe. Of these twenty-seven, all but Vermont and West Virginia will allow the contractor to work in the exclusion period without time charges to the contract. Vermont does not allow any work in the exclusion period. West Virginia allows work but will charge contract time for any days worked in the period. States in the areas that do not use a winter exclusion period tend to use working day contracts and exempt days

Table 13: What is the basis of contract time?

Agency	Calendar Day Only	Working Day Only	Completion Date or Working Day or Calendar Day	Working Day or Calendar Day	Calendar Day or Completion Date
SHAs	2 *	2 **	3 2	5	9
Cities	6	4	2		1
BLM	X				
Navy	X				
AIA	X				

* New York, North Carolina

** Texas, Washington

Table 14: Does the agency have a winter exclusion period and if so does work performed during this period count towards contract time?

Agency	Exclusion Period Yes	Exclusion Period No	Work in period counts towards contract time Yes	Work in period counts towards contract time No	Work in period counts towards contract time NA
SHAs	2 7	2 3	1 *	2 5	2 4 **
Cities	2	1 1		2	1 1
BLM		X			X
Navy		X			X
AIA		X			X

* West Virginia

** Vermont does not allow any work in the exclusion period

where weather keeps the contractor from working.

Other Agencies

Cities show more of a trend towards the use of calendar days. Seven of the 13 cities use calendar days to the exclusion of working days. Four cities use working days only. The federal agencies and the AIA use calendar days only. Only two cities use a winter exclusion period, both in the North East, and neither will charge time for work done in the exclusion period.

Impact and Conclusions

Agencies that include a winter exclusion period in their contracts typically expect severe weather during the winter months. Agencies have recognized that exterior work may not be possible during the winter months. Contract time may or may not be charged during the winter exclusion period when work is actually performed. Contractors need to be aware that winter work may not be permitted.

Contract time defined in calendar days or as a completion date is the easiest to track. There are no disputes to the passage of time. For working day contracts, the agency tracks time and it is frequently subject to interpretation. On the other hand, working day contracts tend to be less risky to the contractor since the effects of weather are typically removed from the charge of contract time.

Limitation on Operations

Introduction

Agencies sometimes require that the contractor not perform contract work on Sundays, holidays, or the day prior to or following a holiday. These days where the contractor might otherwise work will not be available to the contractor. Normal planning may not call for work on these days but delays in the progress of the work may make it desirable to the contractor. Provisions have not restricted work on Saturdays, thereby permitting work on Saturday as make-up days or overtime work on Saturday to achieve constraints programmed without being charged for the time. Agency practices are shown in Table 15.

SHAs

Half of the agencies contractually have the power to require no work to be performed on Sundays and Holidays. Only twelve can require that no work be performed the day before or after a holiday. Most clauses indicate that the contractor can request permission to work on these days but the agency may prohibit work. The Maine clause on limitation of operations is one of the better examples of clauses restricting the contractor from working on Sundays or holidays. It states:

Limitation of Operations (108.04 Maine)

> ...Unless otherwise specified, the Contractor shall not carry on construction operations on Sundays or Holidays, unless of an emergency nature. The Contractor may work on Martin Luther King Day, Washington's Birthday, Patriots Day and Columbus Day without first obtaining permission of the Chief Engineer. Permission to work on Sundays and other Holidays must be obtained prior to the Sunday or Holiday. In addition, if so directed, the Contractor shall suspend all work, other than maintaining the roadway for traffic, on all portions of the project open to traffic, at such other times as the Engineer deems necessary. Working day or calendar days will not be charged against the Contractor during any such suspension period.

Table 15: May the agency require no work be performed on _____?

Agency	Sunday		Holidays		Day Preceding or Following a Holiday	
	Yes	No	Yes	No	Yes	No
SHAs	25	25	25	25	12	38
Cities	8	5	7	6		13
BLM	X		X			X
Navy	X		X			X
AIA		X		X		X

Other Agencies

Approximately half of the other agencies restrict work on Sundays and holidays. It was interesting to note that none of the other agencies had clauses that could restrict work on the day prior to or after a holiday. The AIA document was the least restrictive of documents in that no restrictions were placed on days that could be worked.

Impact and Conclusions

Agency use of provisions that limit contractor operations increase contractor risk as the ability to overcome delays is reduced. The contractors only option is to increase labor when work days may not be increased. This reduces the contractor's flexibility and may result in an increase in contractor bids. SHAs and cities use these clauses to reduce impact on the Public. In private contracting the owner may not use these clauses in hopes of quicker project completion.

Working Days

Introduction

The definition of working days on a working day contract should be of considerable interest to the contracting parties. For all contracts that use working days, the agency tracks and charges time. The contract provisions define working days and how time will be charged. Most agencies define working days as any day except (Saturdays, Sundays, and Holidays), the contractor performs or could be performing work on the contract.

Working days may be charged for Saturdays, Sundays, and Holidays if the contractor works on those days or the time may "belong" to the contractor. Table 16 and Table 16a. present the agency practices in regards to charging of contract time for these days. The agency typically records the time and normally provides the contractor with a periodic record of time charged. The contractor is given a period of time to take exception to the time charges of the agency. Table 17 is a summary of the frequency with which the agency presents the contractor with a record of time charged. Table 18 shows the time in which the contractor has to take exception to the agency log of days charged.

The agency basis for charging time on working day contracts may exclude days of adverse weather. Table 19 records the agency practices on excluding weather delays.

SHAs

The SHA's showed a slight bias towards charging the contractor a working day if the contractor works a Saturday, Sunday or Holiday. Charging contract time on these days means that if the contractor falls behind schedule, it is not possible to catch up by working weekends or holidays. Adding crews and equipment is the only alternative to

Table 16: Does Saturday count as a working day if worked?

Agency	Yes	No	Not Stated	NA
SHAs	16	13	10	11
Cities	2		4	7
BLM				X
Navy				X
AIA				X

Table 16a: Does Sunday or Holiday count as working day if worked?

Agency	Yes	No	NA
SHAs	23	16	11
Cities	4	2	7
BLM			X
Navy			X
AIA			X

Table 17: For working day contracts, how often does the agency submit a record of days charged for the contractor to review?

Agency	Weekly	Twice Monthly	Monthly	No Mention or Other	NA
SHAs	24	3	6	6	11
Cities	2	1		3	7
BLM					X
Navy					X
AIA					X

Table 18: For working day contracts, how long does the contractor have to take exception to the agency log of days charged?

Agency	One Week	10 Days	15 Days	Other	No Mention	NA
SHAs	17	7	4	3 *	8	11
Cities			3		3	7
BLM						X
Navy						X
AIA						X

* Alabama, Colorado, Michigan

Table 19: For working day contracts, are weather delays excluded from time charges?

Agency	Yes	No	No Mention	NA
SHAs	31	2 *	6	11
Cities	5		1	7
BLM				X
Navy				X
AIA				X

* West Virginia, Wyoming

regain time. The working day clause from Illinois is typical of clauses used by the SHA's.

The clause states:

Working Days (108.04 Illinois)

When the contract provides a specified number of working days or a completion date with a guaranteed number of working days, the charging of working days shall start when the Contractor begins actual construction work, and in no case later than 10 days after the execution and approval of the contract, unless otherwise provided in the contract.

A working day shall be defined as any calendar day between May 1 and December 15 inclusive except Saturdays, Sundays or holidays observed by the Contractor's entire work force in Illinois. The length of a working day will be determined by the Engineer from the number of working hours established by actual job practice by the Contractor for the current controlling item, except that not less than eight hours will be considered in the determination.

A full working day will be charged for any day described in the foregoing on which conditions are such that the Contractor could be expected to do a full day's work on the controlling item. A full working day will be charged on days when the Contractor could be working on a controlling item, but elects not to work, or elects to work elsewhere.

No allowance will be made for delay or suspension of the work due to the fault of the Contractor.

The Engineer will determine which days are workable.

(a) A partial working day of one-quarter, one-half or three-quarters shall be charged under the following conditions:

(1) When weather conditions do not permit the completion of a full day's work on the controlling item.

(2) When job conditions due to recent weather do not permit full efficiency of the men or equipment which are working on the controlling item.

(3) A shortage of help which is beyond the Contractor's control prevents reasonable progress on a controlling item.

(4) When any condition over which the Contractor has no control prevents completing a full day's production on the controlling item.

(b) No working day shall be charged under the following conditions:

(1) When adverse weather prevents work on the controlling item.

(2) When job conditions due to recent weather prevent work on the controlling item.

(3) When work has been suspended by an act or omission of the Department or Engineer.

(4) When strikes, lock-outs, extraordinary delays caused by utility and Railroad work, extraordinary delays in transportation or inability to procure critical materials suspend work on the controlling item, as long as these delays are not due to any fault of the Contractor.

(5) When any condition over which the Contractor has no control causes suspension of work on the controlling item.

One copy of the "Weekly Report of the Resident Engineer" will be mailed to the Contractor's office weekly. Any disagreement with the working day charges shown must be expressed in writing to the Engineer within seven days of receipt of the Report giving detailed reasons for the disagreement. The final resolution of such disagreement will be made by the Engineer.

In this case the clause states a weekly report will be mailed to the contractor and the contractor has one week to take exception. Time charges will include any day the contractor works and exclude the winter exception period and Saturdays, Sundays, and holidays if not worked. Weather delays are exempted from time charges.

The clause from Delaware will not charge the contractor working days for working Saturdays but does charge for Sundays and holidays if worked. The clause states:

Working Days (101.73 Delaware)

A working day is defined as a calendar day exclusive of Saturdays, Sundays, or State legal holidays when the contractor can prosecute the work. Working days will not be charged if the contractor elects to work on Saturdays, but will be charged if he is permitted to work on Sundays or State legal holidays. Time charges in the form of working days will start when the contractor begins actual construction work and in no case later than ten days after the written notice to proceed with the work...

...Working days will not be charged under the following conditions:
1. If the contractor elects not to work, when the condition of the ground,

weather conditions, or other conditions beyond the control of the contractor make it impossible in the opinion of the Engineer to carry on any work in accordance with the work schedule.
2. When operations are suspended due to an act or omission on the part of the Department.
3. On working day and calendar day contracts no time will be charged for work performed during December 16 to March 15 inclusive. When the contractor performs work during the period from December 16 to March 15 inclusive, he must secure authorization from the Engineer sufficiently in advance of the proposed work to provide for proper inspection.
The number of working days allowed for the completion of the project are shown in the proposal.

The contractor is also given the option of working during the winter exclusion period without being charged contract time. Weekly submittal of the record of time charged to the contractor is used by most states that use working days. The majority of SHAs allow the contractor one week for review of the record of time charged.

For the two states that do not include weather delays in the basis for contract time charged, both will exempt weather delays that are an act of God. Weather of normal intensity, temperature and frequency is not included.

Other Agencies

Other agency practices parallel the SHAs with working days. The exception to this is shown on Table 18 where it can be seen that half of the cities that use working days do not mention how frequently a copy of the record of contract time charges will be forwarded to the contractor. Working days are not used by the federal agencies and neither are they indicated in the AIA documents.

Impact and Conclusions

The contractor and the agency need to know prior to starting work how contract time will be charged. Some of the definitions used by the agencies do not clearly state if time will be charged for Saturdays, Sundays, and holidays if worked. Time charges during the winter exclusion period are clear, i. e., there is no charge of time if the

contractor cannot or will not perform work. If the contractor elects to work during this period, many agency provisions are not clear if time will be charged. Review periods for the record of time charged are varied and a contractor could lose entitlement to an exception if the contractor does not respond within the agency required time. Allowing the contractor to work on Saturdays, Sundays, and holidays without charging contract time reduces risk for the contractor. The agency is not giving the contractor any more time than was expected and the contractor gains some flexibility in scheduling work. If the provisions are not clear both parties have increased risk for disputes and claims.

Differing Site Conditions

Introduction

In the course of a construction project, it is not unlikely that some aspect of the work will be different from that which is shown in the plans or could normally be expected. In many contracts, the contract vehicle that is in place to deal with these changed conditions is a "Differing Site Conditions" clause. It may also be called a changed conditions clause but the wording is basically the same. This type of clause causes the owner to assume the risk that conditions at the site will not differ from those shown in the plans or that no unexpected hidden physical conditions exist on the project.

The clauses generally cover two types of situations the contractor may encounter. The first situation includes subsurface or latent physical conditions at the site which differ materially from those indicated in the contract documents, namely the plans and specifications. An example of this type of condition is soils differing from those represented in the plans. The second situation is unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as being inherent in the work of the being performed. This part of the clause would cover situations where the contractor encounters a physical condition that a prudent contractor could not reasonably anticipate after having examined the site and being experienced in the type of work involved. An example of this is a foundation contractor encountering an underground stream, during excavation for the foundation of a building, where the site showed no evidence of the stream prior to excavation.

Another key part of the clause is that the contractor, upon discovering a differing site condition, must inform the owner's representative and seek direction before continuing work in the area. As shown in table 20, all agencies that use a differing site

Table 20: In the case of differing site conditions must the contractor notify the agency prior to disturbing?

Agency	Yes	No	No Mention
SHAs	42		8
Cities	8		5
BLM	X		
Navy	X		
AIA	X		

conditions clause require that the contractor notify the engineer on the project that a differing site condition has been encountered prior to disturbing it.

SHAs

For the SHAs, 42 states use a differing site conditions clause. The review indicated that 36 of these states use a standard differing site conditions clause (see Table 21). This clause is frequently located in the supplemental clauses as a set of three clauses, including the Suspensions clause and a clause on Alteration in the Character of the Work. The following clause used by Iowa is typical of the standard clauses used by the SHAs:

Differing Site Conditions (Iowa 1989)

> During the progress of work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the Contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the Contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before they are disturbed and before the affected work is performed.
>
> Upon written notification, the Engineer will investigate the conditions, and if he/she determines that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding loss of anticipated profits, will be made and the contract modified in writing accordingly. The Engineer will notify the Contractor of his/her determination whether or not an adjustment of the contract is warranted.
>
> No contract adjustment which results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice.
>
> No contract adjustment will be allowed under this clause for any effects caused on unchanged work.

Table 21: Do the contract provisions contain a Differing Site Conditions clause and if so, is the clause the standard clause?

Agency	Yes	No	Use Standard Clause
SHAs	42	8 *	36
Cities	8	5	2
BLM	X		
Navy	X		
AIA	X		

* Connectcut, Georgia, Kentucky, Nevada, New York, Pennsylvania, Rhode Island, South Dakota

For the SHAs that do not use a differing site conditions clause, all except New York State have clauses that would allow a contractor to attempt recovery for increased time and cost associated with a differing site conditions. The New York clause specifically places much of the risk associated with a differing site condition on the contractor. Portions of the New York clause **Delays, Inefficiencies, and Interference** (Article 13, New York) are shown below:

> ... A. The Contractor further agrees that he has included in his bid prices for the various items of the contract any additional costs for delays, inefficiencies, or interferences affecting the performance or scheduling of contract work caused by, or attributable to, the following instances:
>
> ... 11. Unforeseen or unanticipated surface and subsurface conditions.
>
> ... C. The provisions of this Article apply only to claims for extra or additional costs attributable to delays, inefficiencies, or interferences and do not preclude determinations by the Commissioner allowing reimbursement for additional direct costs for extra work pursuant to §105-14.

Here the contractor may not recover any of the costs associated with delays or inefficiencies on the job as a result of a differing site condition. The costs associated with idled equipment while awaiting direction can be significant. The contractor who is working under this clause would prudently increase bid prices to include a contingency amount to cover any doubt concerning the site conditions.

In the other states that do not use a Differing Site Conditions clause, recovery of costs for unforeseen work may be through the extra work clause. The Georgia Clause is a typical example of an extra work clause that may allow recovery. The clause states:

Extra Work (104.04 Georgia)

> The contractor shall perform unforeseen work, for which there is no price included in the contract, whenever it is necessary or desirable in order to complete fully the work as contemplated. Such work shall be

performed in accordance with the specifications and as directed, and will be paid for as provided in 109.05.

Other Agencies

As can be seen from table 21 , eleven of the sixteen other agencies use a differing site condition clause. Wording of the clause is much more varied than that used by most of the SHAs. Some cities add other actions the contractor must perform to obtain adjustment to the contract in the case of a differing site condition. The city of Dallas clause is an interesting case in point. Their clause states:

Differing Site Conditions (Dallas 4.3.6)

> If: (1) concealed subsurface conditions are encountered in the course of performance of the work, (2) concealed or unknown conditions in an existing structure are at variance with conditions indicated by the Contract Documents, or (3) unknown physical conditions are encountered below the surface of the ground in an existing structure which are of an unusual nature and materially different from those ordinarily encountered and generally recognized as inherent in the character of the work, the Contract Sum may be adjusted if the Owner and the Architect determine that: (a) the Contractor used reasonable diligence to fully inspect the work site, and (b) the concealed items can be considered extra work to the extent that additional new construction beyond the scope of the Contract Documents is required. Otherwise, any cost adjustment associated with the concealed items will not be considered. Jobsite information and reports provided by the Owner and/or Architect in the Project Manual or otherwise shall be utilized by the Contractor at his own risk, and Owner and Architect neither guarantee nor warrant any information shown therein.

In this clause, the contractor can obtain relief from the condition only if it can be considered extra work with additional new construction beyond the scope of the Contract Documents required. A concealed condition that requires the contractor to change work methods or equipment would not result in an adjustment to the contract. Additional new construction is required. Soft ground discovered on a scraper project requiring that a contractor to use a drag line for excavation would not result in an adjustment to the contract. Soft ground that requires a contractor to drive piles for a foundation, for

which no piles were required in the contract, would qualify for an adjustment to the contract.

The clauses used by the BLM, Navy, and AIA are all similar to the standard clause used by the SHAs. The differing site condition clause used by the federal agencies is mandated for use in the Federal Acquisition Regulations and will be identical in all federal contracts.

Impact and Conclusions

Use of a differing site condition by an agency is an assumption of risk. The agency's purpose is to eliminate contingencies from contractors bids for unforseeable or unknown conditions. The owner is assuming this risk in anticipation of lower bid prices from contractors. While most of the agencies reviewed do use a fairly standard clause, the variations and additional conditions that can be imposed on the contractor make it important that a contractor understand the provision if it is contained in a contract.

Adverse Weather

Introduction

Weather and its impact must be considered on every construction project. The policies of an agency concerning weather can "make or break" a contractor. Provisions relating to time extensions often indicate that the contractor may receive an extension of time if adverse weather delays the completion of a project. Even though the provisions indicate that the contractor may receive an extension for adverse weather, few agencies define the term. Table 22 shows just how few agencies define adverse weather. " Yes" is checked in the table only if the definition is clearly stated and the determination is not left up to the engineer.

SHA's

Only four out of fifty SHAs define adverse weather to the extent that the engineer does not have the determination of what weather conditions are adverse. The Massachusetts provision **Determination and Extension of Contract Time for Completion** (8.10) is one of the SHA provisions clear on this point. The clause states:

> ...D. When delay occurs due to reasonable causes beyond the control and without fault of the contractor, including but not restricted to "Acts of God", ...the time for completion of work shall be extended in whatever amount is determined by the Engineer to be equitable.
>
> An "Act of God" as used in this article is construed to mean an earthquake, flood, cyclone, or other cataclysmic phenomenon of nature beyond the power of the Contractor to foresee or make preparation in defense of. A rain, windstorm, or other natural phenomenon of normal intensity, based on United States Weather Bureau reports, for the particular locality and for the particular season of the year in which the work is being prosecuted, shall not be construed as an "Act of God" and no extension of time will be granted for the delays resulting therefrom...

Table 22: Is Adverse Weather Defined in the Contract Provisions?

Agency	Yes	No
SHAs	4 *	46
Cities	4	9
BLM	X	
Navy	X	
AIA	X	

* Florida, Indiana, Massachusttes, Ohio

Other Agencies

The other agencies Tend to do a better job of defining adverse weather. In the AIA document, clause 4.3.8, **Claims for Additional Time**, the contractor is advised that if adverse weather is the basis for a claim for additional time the contractor must support the contention that the weather was adverse. The clause states:

Claims for Additional Time (4.3.8 AIA 201)

> ... 4.3.8.2 If adverse weather conditions are the basis for a Claim for additional time, such claim shall be documented by data substantiating that weather conditions were abnormal for the period of time and could not have been reasonably anticipated, and that weather conditions had an adverse effect on the scheduled construction.

Here the adverse weather is defined as conditions which are abnormal for the period of time and could not have been reasonably anticipated. The determination of what constitutes adverse weather is clearly defined and not left up to a decision of the engineer or architect.

Impact and Conclusions

The next section will look at time extensions and if agencies will grant additional time due to adverse weather. The definition of adverse weather is not clear the most of the provisions used. With the determination left up to the Engineer in most cases, contractors may not be fairly treated. If the clause states that time extensions will be granted for periods of adverse weather, the term "adverse weather" needs to be defined so there is no disagreement between the parties. The lack of a clear definition increases the risk to the contractor in situations where there need be no disagreements.

Time Extensions

Introduction

Time extensions to the contract may be granted under many different contract clauses including: Time Extensions, Damages for Delay, Termination for Default, and Suspensions. Time extensions are granted to a contractor for excusable delays. These are delays that are not the fault of the contractor. The clauses usually indicate that additional contract time will be granted when the contractor is delayed because of "Unforseeable causes beyond the control and without the fault or negligence of the contractor". These causes may include acts of the agency in its administration of the contract. Contractors must review the provision of the contract to determine how and if time extensions will be granted. Almost all agencies will grant additional time under some clause although many agencies limit the ability of the contractor to recover monetary damages for delays the contractor may have suffered. In reviewing the agency documents, all agencies have provisions that will grant the contractor additional time under some conditions. Agency documents were reviewed specifically to determine if contractors would be granted additional contract time for weather delays. Agency practices on time extension for weather delays are presented in Table 23. Delays due to agency practices or direction will be covered in the discussion of the "Suspensions" clause.

Agency time frame requirements for submission of time extension requests were examined and found to vary considerably. No tabular presentation is possible due to this variation but agency requirements are indicated in the tabulation spreadsheets in Appendices A and B. Some of the more common requirements were that requests for time extensions be submitted anytime prior to completion or from 7 to 10 days after the

Table 23: Does the contract allow for time extensions and if so will the contract time be extended for weather delays?

Agency	Time Extension allowed Yes	No	Extend for weather Delays Yes	No
SHAs	50		43	7 *
Cities	13		13	
BLM	X		X	
Navy	X		X	
AIA	X		X	

* Connectcut, Idaho, Indiana, Kentucky, North Carolina, Pennsylvania, South Carolina

end of the delay.

SHAs

All SHAs granted additional contract time under some conditions. Most agencies will extend the contract for delays associated with adverse weather. Some agencies us a seasonal weighting of days to determine if the contractor will be allowed a time extension due to adverse weather. Typical of the clauses that use a seasonal weighting of days is the clause used by Ohio. The clause states:

Date for Completion **(108.06 Ohio)**

> ...If the Contractor finds it impossible for reasons beyond his control to complete the work by the date as specified or as extended in accordance with the provisions of this subsection, he may make a written request to the Engineer for an extension of time setting forth therein the reasons which he believes will justify the granting of his request. Requests for extensions of time shall be filed in writing by the Contractor with the Engineer not more than 30 days following the termination of the delay. The Contractor's plea that insufficient time was specified is not a valid reason for extension of time. If the Director finds that the work was delayed because of conditions beyond the control and without the fault of the Contractor, he may extend the time for completion in such amount as the conditions justify.
>
> Delays caused by weather or seasonal conditions should be anticipated and will be considered as the basis for an extension of time only when the actual work days lost exceeds the number of work days lost each month due to inclement weather as determined by the following schedule:

Month	Number of Work Days Lost Due to Weather
May	5
June	5
July	4
August	4
September	5
October	6
November	6

> The time between December 1 and April 30 is considered winter months and no extensions will be granted for this time. A work day will be counted as lost if the Contractor's efficiency is reduced more than 50

> percent on the critical item under construction at that time. Weekends and holidays will not be counted as lost work days...

Contracts on a working day basis typically exempt adverse weather. Of the SHAs that do not allow time extensions for weather delays this requirement may apply only to non-working day contracts. Indiana which may use contracts allocating time by any of the three basis, will not grant a time extension for weather delays on calendar day or completion date contracts. The Indiana Clause states:

> **Determination and Extension of Contract Time** (108.06 Indiana)
>
> ...If the contract time is on a calendar day basis or has a fixed calendar date for completion, no extension of time will be considered for unsuitable weather or conditions resulting therefrom....

Some SHAs will grant additional contract time for weather delays only if the weather is unusually severe. The Florida clause is a good example of this type of clause:

> **Computation of Contract Time** (8.7 Florida)
>
> ...Rains or other inclement weather conditions and related adverse soil conditions will be considered as the basis for granting of a time extension only when such conditions are unseasonable, provided that the project records indicate that they did in fact delay one or more controlling items of work...

Other Agencies

All other agencies reviewed granted time extensions due to adverse weather. Provisions for about half of the agencies defined adverse weather and would grant a time extension only if the weather was unseasonable.

Impact and Conclusions

Agencies that define adverse weather and will grant a time extension for unusually severe weather only increase the contractor's risk as the contractor must now make a guess for how weather will impact the job. Better than average weather will result in the contractor completing the job early and probably with a greater profit.

Unusually severe weather will cause the contractor to be delayed and while a time extension will be granted, there is no compensation for increased job costs. Contract provisions that grant a contractor time extensions for any weather delay greatly reduce the contractors risk as possible liquidated damages are avoided for typical weather delays. Agencies may be able to reduce bid prices if provisions are included to extend the contract time for weather delays. Agencies that use working day contracts and exempt weather delays from the time charged to the contract should expect to receive better bid prices versus calendar day or completion contracts where expected inclement weather is not a valid reason for a time extension.

Claims

Introduction

Claims in construction contracts are increasing in frequency and cost. Most agencies recognize that claims are a fact of life and, consequently, include a claims clause in their contracts. A claims clause allows contractors to present disputes to the agency for resolution without having to resort to litigation as a first step. All agencies that have a claims clause require that the contractor notify the agency of any work that is in dispute prior to performing disputed work. If the required notification is not given, the contractor may waive entitlement to compensation for the work. Table 24 presents the number of agencies that have a claims clause. Agency time frames for submission of claims and disputes resolution procedures vary considerably from agency to agency. Some agencies clearly state submission requirements and many do not. Claims submission requirements are detailed on Table 25. The part of the provisions dealing with notification prior to performing work for which a claim will be made is fairly standard in most agencies. Some claims clauses also provide a detailed dispute resolution process.

SHAs

Forty-five SHAs have claims clauses in their contract provisions. For the five states that do not have claims clauses in their provisions, the contractor may still be able to recover for disputed work but the avenue for recovery is through litigation in the courts. Language for the initial notice requirements is similar in all agencies. The language used in the first paragraph of the North Dakota clause is typical of the start of most claims clauses. The clause states:

Table 24: Are claims clauses present in the contract documents?

Agency	Yes	No
SHAs	45	5 *
Cities	9	2
BLM	X	
Navy	X	
AIA	X	

* Connectcut, Illinois, Nebraska, Nevada, Texas

Table 25: When must claims be submitted to the agency?

Agency	10 Days	30 Days	60 Days	120 Days	Other	Not listed
SHAs	1	4	8	2		35
Cities	2	1			3	7
BLM						X
Navy						X
AIA					X	

Claims for Extra Compensation (104.03 North Dakota)

> If the contractor deems additional compensation is warranted for work or materials not covered in the contract or not ordered by the engineer as "extra work," according to section 109.04, the contractor shall, prior to beginning work on which the claim will be based, notify the engineer in writing of the intent to make claim and the basis for such claim for additional compensation. If the basis for the claim does not become apparent until the contractor has proceeded with the work and it is not feasible to stop the work, the contractor shall immediately notify the engineer that work is continuing and that written notification of the intent to make claim will be submitted within 10 calendar days. Failure of the contractor to give required notification and to provide the engineer proper facilities and assistance in keeping strict account of actual costs will constitute a waiver of claim for additional compensation in connection with the work already performed. Notification of a claim, and the fact that the engineer has kept account of the costs involved, shall not be construed as proving or substantiating the claim's validity.
>
> All claims by the contractor for additional compensation shall be submitted in writing within 120 days after completion of the work on which the claim is based....

Here the notice period is clearly stated and the contractor is given a time limit for submission of the claim after the work on which the claim is based. The clause goes on to detail the disputes resolution procedure. Disputes resolution procedures are quite different from SHA to SHA. The Georgia clauses on dispute resolution are particularly thourough and the claims process is very well defined. See appendix C for a copy of the claims provision used by the State of Georgia.

Other Agencies

Of the other agencies reviewed, only two did not have a claims clause in the contract provisions. As discussed with the SHAs, recovery for disputed work on projects of these two agencies may still be possible through the courts. Some of the claims provisions used by the cities are of interest. The clause used by the city of Cincinnati is one of the better clauses used by the Cities.

Claims for Adjustments and Disputes (Cincinnati 105.17)

> All disputes arising under this Contract or its interpretation, whether involving law or fact or both, or extra work, and all claims for alleged breach of contract shall within ten days of commencement of the dispute be presented by the contractor to the city for decision. Such notice need not detail the amount of the claim but shall state the facts surrounding the claim in sufficient detail to identify the claim, together with its character and scope. In the meantime the contractor shall proceed with the work. Any claim not presented within the time limit specified within this paragraph shall be deemed to have been waived, except that if the claim is of a continuing character and notice of the claim is not given within ten days of its commencement, the claim will be considered only for a period commencing ten days prior to the receipt by the city of notice thereof.
>
> The contractor shall submit in detail the claim and the proof thereof. Each decision by the City bill be in writing and will be delivered to the contractor.
>
> If the contractor does not agree with any decision of the city, the contractor shall in no case allow the disputes to delay the work but shall notify the city promptly that the contractor is proceeding with the work under protest and the contractor may then except the matter in question from the final release.

The clause allows the contractor an avenue for disputed work and reasonable time frames to submit notice and proposals. The claims clause used in the AIA document is somewhat different. The AIA clause states:

Time limits on Claims (AIA 201- 4.3.3)

> Claims by either party must be made within 21 days after occurrence of the event giving rise to such claim or within 21 days after the claimant first recognizes the condition giving rise to the claim whichever is later. Claims must be made by written notice. An additional claim made after the initial claim has been implemented by change order will not be considered unless submitted in a timely manner.

In this clause the owner may not know about a potential claim until three weeks after the event or condition giving rise to claim. This increases the risk for the owner and may result in the contractor "blind siding" the owner with a claim that is brought to the

owner's attention after three weeks worth of work has been completed. Resolution of the dispute at this point may be much more costly.

Impact and Conclusions

Construction disputes are here to stay. Owners must understand that early resolution of claims is desirable and results in decreased costs. Using claims clauses in the provisions provides an avenue for this process and may help settle disputed issues. If there is an administrative avenue prior to seeking relief in the courts contractors are more likely to settle and this will reduce costs for both parties. Contractors need to review the claims provisions and determine the required notification time limits so as to not waive an otherwise valid claim. The great variety of disputes resolution provisions (other than the notification requirement) illustrate the many different attitudes of owners. Ignoring the reality of claims and not using provisions to deal with them within the contract forces costly litigation. Claims provisions need to be fair and provide for a review of the dispute at a level above the administrative office dealing with the dispute. Times for the agency to respond and review claims need to be more clearly defined for some agencies.

Suspensions

Introduction

The general conditions provisions of most agencies contain clauses that give the agencies the ability to suspend work on the contracts. Suspensions may be due to the fault of the contractor or due to the fault of the agency. The most important components of these clauses concern the general nature of suspensions and the ability of the contractor to recover costs associated with agency suspensions. If contractors cannot recover damages for agency delays, contract contingencies go up. Most contracts contain provisions for the owner to suspend work when the contractor is not in compliance with the contract. Other provisions detail how the contractor may recover costs if delayed without fault of the contractor. Table 26 addresses agency use of suspension clauses by agencies. In addition to the clauses already mentioned, some agencies have clauses dealing with the discovery of historical or archeological artifacts. There is no standard language in these clauses and contractors may or may not be able to recover costs associated with delays associated with archeological finds. The frequency of agency use of clauses for archeological or historical finds in presented in Table 27.

Another type of clause used by some agencies associated with suspensions clauses are "No Damage for Delay" clauses. Use of this type of clause is declining since the courts take a narrow view of the use of such exculpatory language in contracts. Only one SHA still uses this type of clause although several of the city documents also included them.

SHAs

As can be seen in Table 26, all SHAs have suspensions clauses. A significant number (31) of the agencies use a standard clause that frequently appears in a standard

Table 26: Can the agency suspend work and if so do they use a standard clause?

Agency	Yes	No	Use Standard Clause
SHAs	50		31
Cities	8	5	
BLM	X		
Navy	X		
AIA	X		

Table 27: Is there a clause for suspension of work if historical or archeological finds are encountered?

Agency	Yes	No
SHAs	27	23
Cities	3	10
BLM	X	
Navy	X	
AIA		X

three clause packet in the supplemental specifications. The manner of its incorporation suggests that the three clauses, (Suspensions, Differing Site Conditions, Alteration to Character of the Work) are clauses provided by the Federal Highway Administration for use by the states when federal moneys are involved. The clause used by Iowa is representative of the standard clause in use by many of the agencies. The clause states:

Suspensions of work ordered by the Engineer (Iowa)

> If the performance of all or any portion of the work is suspended or delayed by the Engineer in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the Contractor believes that additional compensation and/or contract time is due as a result of such suspension or delay, the Contractor shall submit to the Engineer in writing a request for adjustment within 7 calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.
>
> Upon receipt, the Engineer will evaluate the Contractor's request. If the Engineer agrees that the cost and/or time required for the performance of the contract has been increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the Contractor, its suppliers, or Subcontractors at any approved tier, and not caused by weather, the Engineer will make an adjustment (excluding profit) and modify the contract in writing accordingly. The Engineer will notify the Contractor of his/her determination in whether or not an adjustment of the contract is warranted.
>
> No contract adjustment will be allowed unless the Contractor has submitted the request for adjustment within the time prescribed.
>
> No contract adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided for or excluded under any other term or condition of this contract.

The clause allows the contractor to recover costs associated with suspensions with the exception of profit. This clause is quite fair and allows the contractor to request adjustments for any "unreasonable" period and the agency will review and make a determination of entitlement.

New York uses clauses that are much more restrictive. In the New York clause, no recovery other than additional time is allowed. The clause states:

Delays, Inefficiencies, and Interference (Article 13, New York)

The Contractor agrees to make no claim for extra or additional costs attributable to any delays, inefficiencies, or interference in the performance of this contract occasioned by any act or omission to act by the State or any of its representatives except as provided in Subsection (B) of this Article. The Contractor also agrees that any such delay, inefficiency, or interference shall be compensated for solely by an extension of time to complete the performance of the work in accordance with the provisions of §108-04 in the Standard Specification. In the event the contractor completes the work prior to the contract completion date set forth in the proposal, the Contractor hereby agrees to make no claim for extra costs due to delays, interference or inefficiencies in the performance of the work except as provided in §(B) of this Article.

A. The Contractor further agrees that he has included in his bid prices for the various items of the contract any additional costs for delays, inefficiencies, or interference affecting the performance or scheduling of contract work caused by, or attributable to, the following instances:

1. The work or the presence on the contract site of any third party, including but not limited to that of other contractors or personnel employed by the State, by other public bodies, by railroad, transportation or utility companies or corporations, or by private enterprises, or any delay in progressing such work by any third party.

2. The existence of any facility or appurtenance owned, operated, or maintained by any third party.

3. The act, or failure to act, of any other public or governmental body, including, but not limited to, approvals, permits, restrictions, regulations or ordinances.

4. Restraining orders, injunctions, or judgements issued by a court.

5. Any labor boycott, strike, picketing or similar situation.

6. Any shortages of supplies of materials required by the contract work.

7. Climatic conditions, storms, floods, droughts, tidal waves, fires, hurricanes, earthquakes, landslides, or other catastrophes. However, payment may be made for repairing damage to the work caused by "Occurrences" as provided in §107-09.

8. Determinations by the Department to open certain sections of the project to traffic before completion of the entire contract work.

9. Increases in contract quantities, additional contract work, or extra work or for delays in the review or issuance of orders-on-contract, or shop drawings, or field change sheets. However, payment for performance of extra work will be made pursuant to §109-05.

10. Failure of the State to provide individual rights-or-way parcels for an extended period of time beyond that indicated by the contract, if such unavailability, as determined by the Commissioner, does not significantly affect the scheduled completion of the contract.

11. Unforeseen or unanticipated surface and subsurface conditions.

12. Stop work orders issued by the Engineer, pursuant to §105-01.

13. Any situation which was, or should have been within, the contemplation of the parties at the time of entering into the contract.

B. The Contractor agrees that the only claims he may make for extra compensation caused by delay, inefficiencies, or interference affecting the performance or the scheduling of contract work will be solely limited to those arising out of the following instances:

1. The issuance by the Commissioner of a stop work order relative to a substantial portion of work, which the Commissioner determines to significantly affect the scheduled completion of the contract, other than those order issued pursuant to §105-01.

2. The unavailability of critical rights-of-way parcels for such an extended period of time beyond that indicated in the contract which the Commissioner determines to significantly affect the scheduled completion of the contract.

In all of such instances, compensation to be considered will be limited to documented additional direct field costs, including field supervision, escalation of costs for labor, materials, and rental equipment, and for such other related additional costs. In no case will additional costs for home office overhead, idle equipment, profit, or financing be allowed. Failure of the Contractor to adequately progress the completion of the work will be considered in determining whether the foregoing instances are the primary causes of delay. In all of such instances, for any claim asserted under this section, the Contractor shall keep detailed written records of the costs and agrees to make them available to the Department at any time for the purposes of audit and review.

Any dispute relating to such claims shall be promptly submitted to the

Commissioner in writing and the Commissioner's determination shall be final and binding on the Contractor. Failure by the Contractor to promptly notify the Commissioner in writing or to maintain and furnish cost records of such claims shall constitute a waiver of the claim.

C. The provisions of this Article apply only to claims for extra or additional costs attributable to delays, inefficiencies, or interference and do not preclude determinations by the Commissioner allowing reimbursement for additional direct costs for extra work pursuant to §105-14.

This clause is very restrictive and severely limits the ability of the contractor to recover for agency suspensions and delays. If the contractor had developed methods and procedures to allow an early finish to the contract and a resultant savings in overhead, any delays by the state that did not cause the contractor to complete the project past the completion date are non-compensable. This type of language greatly inflates bid prices and or reduces profits and puts the contractor and agency in an adversarial relationship at the start of the contract.

Another state that uses harsh contract language is Deleware. The Deleware clause states:

No Claims for Delay Damage (105.21 Delaware)

Any delay in prosecution of the work which is either granted by the Department or deemed to be owed to the contractor by reason of any delay caused by reason beyond the contractor's control, or to which the contractor is deemed to be entitled as a result of a contract claim, as determined by the Department, an arbitrator and/or judicial proceeding, shall entitle the contractor and shall be strictly limited to relief provided in Section 105.20. The contractor shall only be entitled to recover an equivalent extension of time for any delay caused wholly or in part by reasons beyond the contractor's or Department's control and the contractor shall not be entitled to recover any damages for any such delay caused by whatever reason. In the event, a delay may be caused wholly by actions of the Department, such extensions in time shall be granted in an amount equivalent to the actual delay caused by the Department and the contractor shall not be entitled to an additional compensation therefore, other than equivalent extensions of time and only such costs allowed by Section 105.20.

> No payment of compensation of any kind shall be made to the contractor for damages because of any hindrance or delay from any cause in the progress of work, whether such hindrance or delay be avoidable or unavoidable. Any finding by any administrative officer, arbitrator and/or judge that a delay was caused either wholly or in part by actions of someone other than the contractor shall only entitle the contractor to equivalent extensions of time and only such costs allowed by Section 105.20.

As in the New York clause, the ability of the contractor to recover for agency suspensions is severely limited. This is a typical "No Damage for Delay" clause and illustrates the restrictions on the costs to which the contractor should be entitled.

As can be seen from Table 27, a little more than half of the SHAs have suspension provisions relating to the discovery of historical or archeological artifacts. These clauses as a rule are poorly written and do not adequately provide for compensation to be given to the contractor. As an example, the clause used by Maine states:

Historical Deposits (107.25)

> Activities that would cause a disturbance to any object of archaeological, paleontological or other historical interest shall immediately cease and shall not be resumed until an investigation of the deposit has been completed and the removal of articles of interest has been accomplished. Should such a deposit be uncovered the Contractor or the engineer shall notify the Department immediately.
>
> The first indication of archaeological deposits may be the burial grounds or campsites of Indians, revealing the bones of the dead and their implements. The first indications of paleontological deposits may be the exposure of marine fossils or shells found mainly in clay deposits. Indications of deposits of more recent historical interest may be the exposure of dumps in landfill areas, abandoned campfire sites and building foundations.
>
> Delay of the Contractor's operations in the event of the above shall not be compensated for directly and shall be considered incidental to general items in the contract but may be justification for adjustment of working days or calendar days if a delay involves one or more working days or calendar days.
>
> The Contractor's attention is directed to Chapter 398 of MRS Title 27 §371, which places the ownership with the State of Maine of artifacts, specimens and material which are public property by virtue of

having been found on, in or beneath State controlled lands.

Here the contractor cannot recover for delays caused by the discovery of historical finds. When a contractor envisions losing money as a result of historical and archeological finds, few encounters will be reported. There is no incentive for the contractor to cooperate with the intent of the clause since fair compensation will not be forthcoming.

One of the better examples is the clause used by Colorado. The Colorado clause states:

Archaeological and Paleontological Discoveries
(107.23 Colorado)

> When the Contractor's operations encounter plant or animal fossils, remains or prehistoric or historic structures, prehistoric or historic artifacts (bottle dumps, charcoal from subsurface hearths, old pottery, potsherds, stone tools, arrowheads, etc.), the Contractor's affected operations shall immediately cease. The Contractor shall notify the Engineer of the discovery of these materials. When ordered to proceed, the Contractor shall conduct operations in the vicinity of the discoveries as directed. The work will be paid for by the Division as provided in subsection 104.02 when contract unit prices exist, or as extra work as provided in subsection 104.04 when no unit prices exist. Delays to the Contractor because of the materials encountered may be cause for extension of contract time in accordance with subsection 108.06.

As a result of this clause, the contractor has some hope of recovering costs associated with a delay while awaiting direction on the project.

One last suspension clause that is of interest is that used by the state of Florida. The clause has a unique provision that allows the contractor to suspend the contract in order to provide vacation time for employees. This clause is unique among the SHAs. The clause states:

Contractor's Vacation (8.6.4 Florida)

> 8-6.4.1 The contractor will be allowed to suspend operations for a period not to exceed 14 days annually, in order to provide vacation time for his employees. These 14 days may be divided into no more than two separate periods of vacation time.

8-6.4.2 Two periods of time are established for automatic time suspensions. There periods are Thanksgiving, which includes Thanksgiving Day and the following Friday, Saturday, and Sunday; and Christmas, which includes December 24th through January 1st. Vacation days other than provided at Thanksgiving and Christmas will require written request as specified in 8-6.4.3 These automatic time suspensions may be approved verbally by the Project Engineer upon notification by the Contractor of his intent to shut down his operations for one or both of these periods. If the contractor does not shut down his operations during these periods, contract time will be charged as usual.

8-6.4.3 The contractor shall submit written request to the District Engineer for permission to suspend operations, other than those specified in 8-6.4.2 , at least 30 days in advance of the date of suspension.

8-6.4.4 The department reserves the right to refuse permission for a suspension (including automatic suspensions) when it might cause undue inconvenience to the traveling public or when, because of other factors, uninterrupted prosecution of the work is essential.

8-6.4.5 The contractor shall retain sufficient personnel at the job site to properly maintain all signs, warning devices and lights.

8-6.4.6 Contract time will not be charged during the period of any approved suspension for vacation, as long as no work (with the exception of that specified in 8-6.4.5) is accomplished on the project.

No other SHA allows the contractor to suspend the contract without incurring time charges. Tourism and vacations are a major factor in the Florida economy and it is interesting to see that carried into the construction contracts for the SHA.

Other Agencies

In the provisions of the other agencies, not all agencies can suspend work on the contract. Some agencies do not have suspension clauses in their provisions. In these contracts the issue of how the contractor may recover for agency delays is even more cloudy. Recovery may still be possible but may have to be sought under the changes clause.

As mentioned in the introduction, use by cities of no damage for delay clauses is much more prevalent. Some examples of the clauses used by cities are provided below:

Liquidated damages (8.4B Honolulu)

> ...B. Delay caused by the City. Except as provided in subsection 8.1, neither the City nor the Contractor shall be entitled to damages for any delay caused by the City in the performance of the work under the contract. In such event, however, the City shall grant the Contractor an extension of time pursuant to subsection 6.2

Extension of Time (4.05 Tampa)

> ...The contractor agrees to make no claim for damages for delay in the performance of this contract occasioned by any act or omission to act of the city or any of its representatives or because of any injunction which may be brought against the city or its representatives and agrees that any such claim shall be fully compensated for by an extension of time to complete performance of the work as provided herein.

The comments made about state use of these clauses holds true for the cities. Harsh contract language equals increased bid prices from contractors. Contingencies must be included to cover the possible costs that cannot otherwise be recovered.

Archeological clauses used by the cities are as poorly written as those used by most of the SHAs. Great improvement is needed in the quality of these clauses.

The AIA document has a unique provision allowing the contractor to suspend work if not paid by the owner after a required period of time. The clause states:

Failure of Payment (AIA 201-9.7)

> If the architect does not issue a certificate for payment, through no fault of the contractor, within seven days after receipt of the contractor's application for payment, or if the owner does not pay the contractor within seven days after the date established in the contract documents the amount certified by the architect or awarded by arbitration, then the contractor may, upon seven additional days written notice to the owner and architect, stop the work until payment of the amount owing has been received. The contract time shall be extended appropriately and the contract sum shall be increased by the amount of the contractor's reasonable costs of shut-down, delay and start-up, which shall be accomplished as provided in article 7.

Here at last is a provision that gives the contractor some real leverage with the owner. The owner is required to promptly pay the contractor for work performed if no

disagreement exists. With a provision like this in the contract, the contractor may reduce contingency for financing costs as payment for work performed should be fairly certain and quick.

Impact and Conclusions:

The various suspension clauses used by agencies in their provisions can have a significant impact on the amount of contingency that a contractor adds to a bid. Restrictive language and "No Damage for Delay" clauses cause higher bids due to increased contractor risk. "Archeological and Historical Deposits" clauses that do not provide for compensation for the contractor for all associated costs will limit the contractors cooperation with the clause and reduce reporting of deposits. Better clauses need to be developed that are fair to all parties and yet preserve items and information from out past.

Liquidated Damages

Introduction

On many construction projects, where time is of the essence, the agency uses a liquidated damages provision in the contract. Under the terms of this clause, the contractor and the agency agree that if the contractor fails to complete the project within the time set forth in the contract, the contractor will pay to the agency a pre-determined sum for each and every day project completion is delayed. This payment is compensation to the agency for financial and other losses for delayed completion. Since it is difficult to determine the actual value of the losses, the pre-determined sum is used in lieu of actual damages.

Liquidated damages are used by most agencies and are applied to each and every day the contractor exceeds the contract completion date. Agencies that may use contracts that allocate time in more than one of the three methods sometimes have different values of liquidated damages for calendar day and completion date contracts than is used for working days. Table 28 presents the number of agencies that use liquidated damage provisions and those that use separate values for calendar day versus completion date or working day contracts.

SHAs

All SHAs utilize liquidated damage provisions for late contract completion. The sums charged per day vary from agency to agency as does the practice of using separate values for working day contracts versus calendar day and completion date contracts. The provision used by Wisconsin is typical for the provisions used by those SHAs that use a separate value of liquidated damages for calendar day and completion date versus working day contracts. The provision states:

Table 28: Are liquidated damages included in the provisions and if so are separate values used for working day vs calendar day or completion date type contracts ?

Agency	LDs Included Yes	LDs Included No	Separate Values Yes	Separate Values No	Separate Values NA
SHAs	50		19	24	7
Cities	13			4	9
BLM	X				
Navy	X				
AIA		X			

Liquidated Damages (108.8 Wisconsin)

Should the contractor fail to complete the work within the time agreed upon in the contract or within such extra time as may have been allowed by extensions, there shall be deducted from any monies due or that may become due the contractor, for each and every calendar day for completion date contracts, or working day for working day contracts, that the work shall remain uncompleted, a sum specified as follows:

Original Contract Amount		Daily Charge	
From More Than	To and Including	Calendar Day	Working Day
$ 0	$ 50,000	$125.00	$ 275.00
50,000	100,000	175.00	300.00
100,000	300,000	225.00	475.00
300,000	500,000	375.00	750.00
500,000	1,000,000	475.00	1,200.00
1,000,000	- - - - - - -	750.00	1,750.00

This sum shall be considered and treated not as a penalty but as fixed, agreed and liquidated damages due the State from the contractor by reason of inconvenience to the public, added cost of engineering and supervision, maintenance of detours and other items which have caused an expenditure of public funds resulting from his failure to complete the work within the time specified in the contract.

Permitting the contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, shall in no way operate as a waiver on the part of the Department of any of its rights under the contract.

With the exception of the separate values for different types of contracts, clauses used by other SHAs are similar with the exception of Michigan. The Michigan clause states:

Liquidated Damages (1.08.07 Michigan)

...b. Failure to Complete on Time - If the Contractor fails to complete the entire project on or before the contract time specified in the proposal or on or before the authorized extension thereof without liquidated damages, the Contractor will be charged , for each calendar day that the work shall remain uncompleted, the applicable sum set forth in Table 1.08-1 except as otherwise provided herein.

The applicable Liquidated Damages per Calendar Day, as set forth in Table 1.08-1, will be reduced to 50 percent of the amount indicated by the schedule after the date the project is accepted for traffic.

Liquidated Damages per Calendar Day will be assessed at 50

percent of the amount indicated in Table 1.08-1 for projects where traffic is maintained on the facility under construction.

Damages for failure to meet the requirements for completion of the project will not be assessed during periods of seasonal suspensions.

Liquidated Damages for failure to open to traffic on time and for failure to complete on time will not be assessed simultaneously.

This clause allows for the charging of one half of the stated value of liquidated damages if the contractor has or keeps the project open to traffic but is not otherwise complete. This is perhaps in recognition of legal challenges that argue that if the project is open to traffic there are no damages to the agency.

Other agencies

All other agencies except the AIA document provide for liquidated damages to be assessed against the contractor for late completion of work. There are only minor variations in the wording of the clauses except for the city of Honolulu which presents a No Damage for Delay clause under the Liquidated Damages provision. This clause was previously presented in the discussion on the Suspensions clause.

Impact and Conclusions

Liquidated damages are used where the calculation of actual damages are complex and difficult to determine. Most agencies use liquidated damages and as long as the sum charged per day is not unreasonable the courts have upheld the legality of the clauses. Agencies must not make the daily charge so large as to have no reflection to the actual value of the damages the agency could reasonably anticipate as the courts may not consider these provisions valid and the agency may recover no damages. Contractors must be aware of the sum to be charged for each day of late completion so as to know the financial loss to be expected for late completion. If the agency schedule is not reasonable and the contractor knows that completion will be late, the contractor must add the

expected value of liquidated damages to be assessed to the bid.

Inadequate Maintenance

Introduction

Many agencies have provisions that allow them to direct the contractor to perform maintenance on the project if the engineer deems that the contractors maintenance is inadequate. Adequate maintenance is defined as keeping the roadway and structures in satisfactory condition, at all times including maintaining the previous course or subgrade during all construction operations. Safe traffic zones and barricades are required to be maintained at all times. These clauses are more common in the SHAs although some cities do use them. The provisions typically allow the contractor 24 hours to perform the required maintenance or the agency may perform it or have it performed with back charges being assessed against the contractor. Table 29 presents agency practices on required contractor response to notices of inadequate maintenance.

SHAs

Thirty of the SHAs have a requirement for the contractor to respond to a notice of inadequate maintenance. Agencies that have a 24 hour notice requirement use clauses similar to that used by the state of Mayrland. The Maryland clause states:

Failure to Maintain Entire Project (5.12 Mayrland)

> Failure on the part of the Contractor, at any time, to comply with the provisions of 5.11 above, will result in the procurement officer immediately notifying the contractor to comply with the required maintenance provisions. In the event that the contractor fails to remedy unsatisfactory maintenance within 24 hours after receipt of such notice, the procurement officer will immediately proceed with adequate forces and equipment to maintain the project, and the entire cost of this maintenance will be deducted from monies due the contractor.

The provisions of Idaho and New Mexico and Maine indicate that the contractor must proceed with maintenance immediately after receipt of a notice of inadequate

Table 29: How quickly must the contractor respond to notice of inadequate maintenance of the project?

Agency	Immediately	24 Hours	48 Hours	No Clause	Other
SHAs	3 *	24	2	20	1 **
Cities		1	1	11	
BLM				X	
Navy				X	
AIA				X	

* Idaho, Maine, New Mexico

** New Hampahire

maintenance. In other respects, their clauses are similar to those of other states. The Idaho clause is presented here as a contrast to the 24 or 48 hour notice provision:

Failure to Maintain Roadway or Structure (105.15 Idaho)

> If the Contractor, at any time, fails to comply with the provisions of subsection 105.14, the Engineer will immediately notify the contractor of such non-compliance in writing. If the contractor fails to remedy unsatisfactory maintenance after receipt of such notice, the Engineer may immediately proceed to maintain the project, and the cost of this maintenance will be deducted from monies due to become due the contractor on his contract.

The one state indicated as "other" in Table 29 is New Hampshire. The contractor is required to respond to a notice of inadequate maintenance but no notice period is stated and immediate response is not required. Twenty SHAs do not have a requirement for the contractor to respond to a notice of inadequate maintenance.

Other Agencies

Only two cities of the other agencies reviewed have a requirement for the contractor to respond to a notice of inadequate maintenance. The provisions of the two cities are no different than that used by Maryland. The federal agencies and the AIA document do not have any such requirement.

Impact and Conclusions

The presence of a provision allowing the agency to direct the contractor to remedy inadequate maintenance does not keep agencies which do not have such a provision from directing and or charging a contractor to maintain the project. If the contract provisions require the contractor to maintain the project and the contractor does not, then under the default clauses the contractor can be directed to remedy the situation. A Failure to Maintain clause makes it easier to direct the contractor and keeps the relationship better since the default clause is not mentioned in the direction to maintain.

Such clauses also communicate to bidders that the owner is committed to this issue and that the successful bidder will be forced to comply.

Termination

Introduction

Termination provisions fall into two categories. Termination for Default and Termination for Convenience of the agency. In Termination for Convenience provisions, the agency reserves the right to terminate the contract at any point if it is determined that the agency cannot continue with the contract. Some agencies limit termination for convenience to instances where court injunctions or national emergencies prevent the agency from completing the contract. Other agencies include statements that allow the agency to terminate for convenience if it is determined to be in the best interest of the agency to do so. Most Termination for Convenience clauses allow the contractor to recover costs for work completed up to the point of termination and define what costs the contractor can recover. Agency use of Termination for Convenience clauses is presented in Table 30.

The other form of termination clause used is a Termination for Default clause. In this clause the agency lists conditions under which the agency will terminate the contract and make claim against the contractor for damages. Termination for Default provides for serious consequences for the contractor. The project can be halted and payments to the contractor can be suspended. The contractor is liable for damage to the agency and the contractor's bond is placed at risk. All agencies reviewed use Termination for Default clauses. All clauses state the conditions for which the contract may be terminated for default and most provide for the contractor to receive notice prior to the agency termination of the contract. Some agencies indicate that the surety will receive an additional notice after termination prior to the agency assuming the work. Agency practices on notice requirements for termination for default are

Table 30: Can the agency terminate the contract for convenience?

Agency	Yes	No
SHAs	45	5 *
Cities	10	3
BLM	X	
Navy	X	
AIA		X

* Indiana, Missouri, Nevada, North Carolina, Rhode Island

presented in Table 31 and Table 32.

SHAs

Only four SHAs do not include a provision for termination of the contract for convenience. Some agencies limit their ability to terminate the contract for convenience to instances of national emergency or court injunction. One of the more through Termination for Convenience clauses is that in use by South Carolina. The South Carolina clause states:

Termination of Contract (105.14 South Carolina)

> The Department may, by written order, terminate the contract or any portion thereof after determining that for any reasons beyond either Department or Contractor control he is prevented from proceeding with or completing the work as originally contracted, and that termination would therefore be in the public interest. Such reasons for termination may include, but need not be necessarily limited to, executive orders of the President relating to prosecution of war or national defense, national emergency which creates a serious shortage of materials, insufficient funds by the Department due to extenuating circumstances, orders from duly constituted authorities relating to energy conservation, and restraining orders or injunctions obtained by third-party citizen action resulting from national or local environmental protection laws or where the issuance of such order or injunction is primarily caused by acts or omissions of persons or agencies other than the Contractor.
>
> When the Department orders termination of a contract effective on a certain date, all completed items of work as of that date will be paid for at the contract bid price. Payment for partially completed work will be made either at agreed prices or by force account methods described elsewhere in these Specifications. Items which are eliminated in their entirety by such termination shall be paid for as provided in subsection 109.05 of these specifications.
>
> Acceptable materials, obtained by the Contractor for the work but which have not been incorporated therein, may, at the option of the Department, be purchased from the Contractor at actual cost delivered to a prescribed location, or otherwise disposed of as mutually agreed.

Table 31: How long does the contractor have to respond to/or correct deficiencies prior to the agency termination of the contract?

Agency	5 Days	7 Days	10 Days	15 Days	Other	Not listed
SHAs	1	1	37	3		8
Cities		1	4	1	2	5
BLM			X			
Navy			X			
AIA					X	

Table 32: How long does the surety have to take over work prior to agency performing or having work performed by others?

Agency	5 Days	10 Days	15 Days	20 Days	30 Days	Not listed
SHAs		2		1	1	46
Cities	1	3	1			8
BLM						X
Navy						X
AIA						X

> After receipt of Notice of Termination from the Department, the Contractor shall submit, within 60 days of the effective termination date, his claim for additional damages or costs not covered above or elsewhere in these specifications. Such claim may include cost items as reasonable idle equipment time, mobilization efforts, bidding and project investigative costs, overhead expenses attributable to the project terminated, legal and accounting charges involved in claim preparation, subcontractor costs not otherwise paid for, actual idle labor cost if work is stopped in advance of termination date, guaranteed payments for private land usage as part of original contract, and any other cost or damage item for which the Contractor feels reimbursement should be made. The intent of negotiating this claim would be that an equitable settlement figure be reached with the Contractor, In no event, however, will loss of anticipated profits be considered as part of any settlement.
>
> The Contractor agrees to make his cost records available to the extent necessary to determine the validity and amount of each item claimed.
>
> Termination of a contract or portion thereof shall not relieve the Contractor of his contractual responsibilities for the work completed, nor shall it relieve the Surety of its obligation for and concerning any just claims arising out of the work performed.

The South Carolina clause is complete and provides for a fair settlement with the contractor for the value of the terminated contract.

All SHAs include provisions for termination of the contract for default. Language for the Termination for Default clause is fairly standard including the enumerations of most of the conditions under which the agency may terminate the contract for default. A typical example of a Termination for Default is that used by Wisconsin:

Default on contract (108.9 Wisconsin)

> If the contractor: (1) fails to begin the work under the contract within the time specified, or (2) fails to perform the work with sufficient workers and equipment or with sufficient materials to insure the completion of said work within the specified time, or (3) performs the work unsuitably or neglects or refuses to remove materials or to perform anew such work as shall be rejected as unacceptable and unsuitable, or (4) discontinues the prosecution of the work, or (5) fails to resume work which has been discontinued within a reasonable time after notice to do so, or (6) becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency, or (7) allows any final judgement to stand

against him unsatisfied for a period of 48 hours, or (8) makes an assignment for the benefit of creditors, or (9) is determined to be in violation of the provisions of the contract relative to hours of labor, wages, equal opportunity, character and classification of workers employed, or (10) for any other cause whatsoever fails to carry on the work in an acceptable manner, the engineer may give notice in writing to the contractor and his surety of such delay, neglect, or default, specifying the same.

If the contractor, within a period of 10 calendar days after the date of such notice, shall not proceed in accordance therewith, then the Department shall, upon written certification by the engineer of the fact of such delay, neglect or default and the contractor's failure to comply with such notice, have full power and authority to forfeit the rights of the contractor and at its option to call upon the surety to complete the work in accordance with the terms of the contract. In lieu thereof, the Department may take over the work, including any or all materials and equipment on the ground as may be suitable and acceptable, and may complete the work by or on its own force account, or may enter a new agreement for the completion of said contract in an acceptable manner. All costs and charges incurred by the Department, together with the cost of completing the work under contract, shall be deducted from any monies due or which may become due on such contract. In case the expense so incurred by the Department shall be less than the sum which would have been payable under the contract if it had been completed by said contractor, then said contractor shall be entitled to receive the difference subject to any claims for liens thereon which may be filed with the Department, or any prior assignment filed with it. In case such expense shall exceed the sum which would have been payable under the contract, the contractor and the surety shall be liable and shall pay to the Department the amount of such excess.

Other Agencies

Agency practices by the other agencies show little to no variation in the termination clauses when compared to most SHA provisions with the exception of the AIA document. In the AIA document, in addition to the owner being able to terminate the contract, the contractor is given the ability to terminate the contract. The AIA clause states:

Termination by the Contractor (AIA 201-14.1)

The contractor may terminate the contract if the work is stopped for a period of 30 days through no act or fault of the contractor or a subcontractor, sub-subcontractor or their agents or employees or any

other persons performing portions of the work under contract with the contractor, for any of the following reasons:
1. Issuance of an order of a court or other public authority having jurisdiction;
2. An act of government, such as a declaration of national emergency, making material unavailable;
3. Because the architect has not issued a certificate for payment and has not notified the contractor of the reason for withholding certification as provided in subparagraph 9.4.1, or because the owner has not made payment on a certificate for payment within the time stated in the contract documents;
4. If repeated suspensions, delays or interruptions by the owner as described in paragraph 14.3 constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365 day period, whichever is less; or
5. The owner has failed to furnish to the contractor promptly, upon the contractor's request reasonable evidence as required by subparagraph 2.2.1.

The AIA provision allows the contractor to terminate the contract under the conditions above. This ability is a powerful tool to ensure owner interference with the work does not become excessive. The evidence required in subparagraph 5 refers to evidence of adequate financial resources to complete the project. If the owner cannot provide the contractor with reasonable evidence of adequate financial resources, the contractor can terminate the contract. This provision is unique for the documents reviewed.

Impact and Conclusions

There is not a major difference in the provisions used by agencies with respect to termination. All agencies should consider using Termination for Convenience provisions similar to the clause used by South Carolina if they use such a clause. Contractor risk increases slightly with the presence of a Termination for Convenience clause as the allocation of overhead in unit prices needs to be considered if there is a chance that items may be deleted from the contract. Bid prices may increase slightly if agencies have a history of terminating contracts for convenience.

Owner financial resources are not typically a problem with federal agencies,

SHAs and Cities. The AIA clause is major protection for the contractor working in private industry. Owners who use the AIA documents need to be aware of this provision and ensure financing is adequate if they use this provision. Contractors need to push for the use of this provision as it affords them protection from unreasonable or financially insolvent owners.

Payments

Introduction

All contracts provide for payments to the contractor. Almost all contracts provide for partial payments to the contractor during the course of construction. Payments may be based on a schedule of values submitted by the contractor after award or on unit prices established at the time of bid. All of the SHA documents reviewed provided for payments based upon unit prices. Progress payments are due to the contractor on a periodic basis as established in the contract documents. Table 33 provides an indication of agency practices as regards to frequency of progress payments.

SHAs

Most SHAs make progress payments on a monthly basis. Other frequencies for payments are bi-weekly and twice monthly. Time frames for payment after the submission of a request for payment were not indicated in the provisions. Many of the states that indicate payments are made monthly indicate that this is the "normal" practice which suggests that a more frequent schedule of payments may be negotiated with the agency.

Other Agencies

Almost all of the other agencies reviewed indicate that payment will be made monthly. Of the two responses listed as other (Milwaukee and the AIA document), both indicate that payments will be made from time to time. Milwaukee's provision states:

> **Progress Payments** (2.9.12 Milwaukee)
>
> If the contractor shall proceed properly and with diligence to perform and complete this contract, the Commissioner may, from time to time as the work progresses, grant to the contractor an estimate of the amount already earned,...

Table 33: How often are progress payments made?

Agency	Bi-Weekly	Twice Monthly	Monthly	No Mention	Other
SHAs	4	7	39		
Cities			11	1	1
BLM			X		
Navy			X		
AIA					X

The frequency for payment is a topic for contractors to consider when determining mark up values on bids to be submitted. In addition to stating the frequency of partial or periodic payments, the federal agencies are required to pay the contractor in 14 days after the date the contractor submits an invoice. This requirement is covered under the federal Prompt Payment Act which is a part of the contract. The Prompt Payment Act clause states:

> **Prompt Payment For Construction Contracts** (FAR 52.232-27)
>
> ...(a) The due date for making such payments shall be 14 days after receipt of the payment request by the designated billing office, However, if the designated billing office fails to annotate the payment request with the actual date of receipt, the payment due date shall be deemed to be the 14 day after the date the contractor's payment request is dated, provided a proper quantity, quality, or contractor compliance with contract requirements.
>
> (b) The due date for payment of any amounts retained by the Contracting Officer in accordance wit the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts, shall be as specified in the contract , if not specified, 30 days after approval for release to the contractor by the Contracting Officer...

This clause spells out how long the contractor will have to wait to be paid for a partial payment. The federal agencies and the AIA document were the only documents reviewed that indicated the time frame for contractor payment. The AIA document states that the contractor is to be paid within seven days of the date established in the contract.

Impact and Conclusions

The frequency of payments has a direct impact on the contractor's required financing. More frequent payments reduce the length of time a contractor will be required to adequately finance materials, labor, and equipment. More frequent payments should result in a reduction of contractor bid prices. Another benefit to agencies for more frequent payments is the probable reduction in attempted front-end loading of the

bid, i. e., with more frequent payments, the contractor does not have as much of a problem with cash flow. The benefits to the agency may be worth the increased effort required to process partial payments on more than a monthly basis.

VII. Conclusions

Conclusions have been presented on each area of the results already presented. Some overall conclusions are possible from the data reviewed.

It appears that there is very little consistency in the clauses used by the various agencies. There are some similarities in the general conditions provisions such as format and some clauses. For the most part the format of the general conditions follows the CSI format. Most agencies use 10 sections within division one and use standardized titles for these sections. Sections and titles are as follows:

101- Abbreviations and Definitions

102- Bidding Requirememts and Conditions

103- Contract Award and Execution of Contract

104- Scope of Work

105- Control of Work

106- Control of Materials

107- Legal Relations and Responsibility to Public

108- Prosecution and Progress

109- Measurement and Payment

110- Control of Environment

Provisions dealing with time are located throughout these sections. The standard wording found in some agency provisions appears to be driven by the Federal Highway Administration (FHA). All SHAs have contact with this agency and certain clauses are required by FHA in order to qualify for federal funding of projects.

The findings of this study are consistent with the findings of Couey's 1987 study. Different definitions for adverse weather were used in the two studies which accounts

for the difference in the number of agencies that define adverse weather in their provisions. Most states use standard Differing Site Conditions and Suspensions clauses that are designed to reduce the risk for contractors and thereby reduce bid prices for the agency.

The contracting practices of Nevada and New York tend to be quite different when compared with the practices of the remaining states. New York utilizes many restrictive clauses and has very harsh contract language. It is expected that bids are at a premium where such language is used. General conditions provisions used by Nevada indicate that contracting practices are much less formal. Many standard type of clauses are missing and it appears that a limited number of contractors are utilized. The clauses contain an option to renew the contract at last years prices which indicates a one year contract period and no fixed bid quantity. This may be tied to the low population density and lack of numerous contractors.

The agency provisions were reviewed for provisions dealing with ownership of contract float. No agencies stated float ownership although some agencies address float in their scheduling clauses.

Federal and State Highway Administration general conditions provisions are generally more equal in the allocation of risk than those used by other agencies. This is witnessed by the more numerous use by city agencies of No Damage for Delay clauses and the more restrictive Suspensions clauses.

The AIA document presents some unique clauses that provide protection to the contractor. The ability of the contractor to have the owner prove that adequate financial resources are available is helpful when not dealing with a public agency. The AIA provisions granting the contractor the ability to suspend work in case of no payment and

to terminate the contract have no equal in the provisions of the public agency documents that were reviewed. Indeed, many of the agency documents reviewed give the agencies the power to cause long suspensions of work and all the contractor can recover is additional contract time.

Most agencies utilize clauses that fairly allocate risk between the agency and the contractor, but there are still some agencies that presumably receive higher bid prices as a direct result of their use of more onerous provisions. The differences in agency practices are sufficient that contractors must be very careful to read and understand the various nuances of the differences in time provisions used by different agencies. Practices just across a state line can be as sufficiently different as to dictate whether or not a contractor will gain or lose money on a particular project.

VIII. Recommendations

A. Introduction

Recommendations are addressed in four parts - State/Federal Agencies, Cities, Contractors and Research.

B. State/Federal Agencies

Recommendations:

1. Where allowed by law, agencies should consider using uniform clauses. The Federal Highway Administration should take the lead in this area.

   a. Clauses should be developed that are fair to the contractor. Use of the standard Differing Site Conditions and Suspensions clauses is a start but other clauses need to be improved. As an example, clauses that deal with Archeological and Historical Deposits are unfair to the contractor. The clause needs to allow the contractor monetary compensation for delays during suspended work and payment for any work done to preserve or remove deposits.

   b. Contract terms need to be clearly defined with interpretation not left up to one party. An example of this are the clauses dealing with time extensions. Most of the clauses indicate that extensions will be granted for adverse weather but the definition of what constitutes adverse weather is left up to the Engineer.

   c. Time frames for various notices and submittals should be standardized and clearly stated. The contractor should be given a specific length of time to perform a required action. Proposals due 7 days after the end of a delay in the standard Suspensions clause is a good example. Specific requirements should be included for submission of requests for additional contract time and proposals for equitable adjustment under the claims clause.

C. Cities

Recommendations

1. Consideration should be given to the use of the provisions of the State Highway Agency in which the city is located as the standard specification for city work. Any special requirements can be included in a city issued supplemental specification.

2. Eliminate provisions that place unfair risk on the contractor.

   a. No damage for delay clauses should be eliminated.

   b. Suspension and Differing Site Conditions clauses that fairly compensate the contractor for agency delays or unforeseen and unanticipated conditions will reduce bid prices.

D. Contractors

Recommendations

1. Be aware that there are significant differences between State Highway Agencies in time provisions.

   a. Read the general provisions and make a list of the notice requirements contained therein.

   b. Do not assume that the definition of contract time and how it will be charged is the same in other states.

2. Lobby for changes in the contract clauses that concern time when the clause puts the contractor at increased risk or requirements are not clear. Get the contractor association involvement in pushing for uniform contract clauses.

E. Research

Recommendations

1. Conduct a study similar to this one for a large selection of private owners.

a. Request copies of the general conditions provisions, supplemental provisions and contract agreement forms.

2. Conduct a study using the existing SHA general conditions data base that examines one or more of the following areas: Indemnification, payments, disputes resolution.

IX. APPENDIX A

SUMMARY SHEETS FOR STATE HIGHWAY AGENCIES

Are Holidays listed in the contract and if so, how many holidays does the agency observe? (Summarized in Table 1)

	Listed	#Holidays	Not Listed	Unusual Days
Alabama		14		Mardi Gras, Thomas Jeffersons Birthday and *
Alaska		11		Stewards Day, Alaska Day
Arizona			X	
Arkansas		10		
California			X	
Colorado		10		
Connecticut			X	
Delaware		13		Day after Thanksgiving, Good Friday
Florida		8		Day after Thanksgiving,
Georgia		12		*
Hawaii			X	
Idaho		9		
Illinois			X	
Indiana		14		Good Friday, Election Days, Day after Thanksgiving
Iowa			X	
Kansas		8		
Kentucky		13		Franklin D. Roosevelt Day, and *
Louisiana			X	
Maine		11		Patriots Day
Maryland			X	
Massachusetts			X	
Michigan		9		
Minnesota			X	
Mississippi		10		*
Missouri			X	
Montana		11		State General Election Day
Nebraska			X	
Nevada			X	
New Hampshire		11		Fast Day
New Jersey		11		Presidential Election Day
New Mexico		10		
New York			X	
North Carolina			X	
North Dakota		9		Good Friday
Ohio			X	
Oklahoma			X	
Oregon			X	
Pennsylvania			X	
Rhode Island		9		Victory over Japan Day
South Carolina			X	
South Dakota		10		Pioneer Day
Tennessee		11		Good Friday
Texas			X	
Utah		11		Pioneer Day
Vermont		12		Town Meeting Day, Benningston Battle Day
Virginia			X	
Washington		10		Day after Thanksgiving
West Virginia		12		Good Friday, West Virginia Day
Wisconsin		9		Good Friday, Christmas Eve, New Years Eve
Wyoming		9		

* Observes Confederate Memorial Day, Jefferson Davis' Birthday, Robert E. Lee's Birthday

May the Contractor Withdraw or Modify a bid any time prior to bid opening?
(Summarized in Table 2)

	Yes	No	Other
Alabama	X		
Alaska	X		
Arizona	X		
Arkansas	X		
California	X		
Colorado	X		
Connecticut	X		
Delaware	X		
Florida	X		
Georgia	X		
Hawaii	X		
Idaho	X		
Illinois	X		
Indiana	X		
Iowa	X		
Kansas	X		
Kentucky	X		
Louisiana	X		
Maine	X		
Maryland	X		
Massachusetts	X		
Michigan	X		
Minnesota	X		
Mississippi	X		
Missouri	X		
Montana	X		
Nebraska	X		
Nevada	X		
New Hampshire	X		
New Jersey	X		
New Mexico	X		
New York		X	
North Carolina	X		
North Dakota	X		
Ohio	X		
Oklahoma	X		
Oregon	X		
Pennsylvania			Not after 9 AM on day of bid opening
Rhode Island			Not Later Than 2 HR Prior to Bid Opening
South Carolina	X		
South Dakota	X		
Tennessee	X		
Texas	X		
Utah	X		
Vermont	X		
Virginia	X		
Washington	X		
West Virginia	X		
Wisconsin	X		
Wyoming	X		

How long after bid opening can the agency award the contract?
(Summarized in Table 3)

	30 Days	40 Days	45 Days	50 Days	60 Days	90 Days	Not listed or other
Alabama	X						
Alaska		X					
Arizona	X						
Arkansas		X					
California	X						
Colorado	X						
Connecticut	X						
Delaware	X						
Florida				X			
Georgia	X						
Hawaii					X		
Idaho			X				
Illinois			X				
Indiana	X						
Iowa	X						
Kansas	X						
Kentucky			X				
Louisiana			X				
Maine	X						
Maryland					X		
Massachusetts			X				
Michigan							49 DAYS
Minnesota	X						
Mississippi					X		
Missouri			X				
Montana			X				
Nebraska	X						
Nevada							X
New Hampshire					X		
New Jersey	X						
New Mexico	X						
New York							No MENTION
North Carolina					X		
North Dakota	X						
Ohio							10 DAYS
Oklahoma							AS ALLOWED BY LAW
Oregon	X						
Pennsylvania					X		
Rhode Island	X						
South Carolina					X		
South Dakota	X						
Tennessee	X						
Texas	X						
Utah	X						
Vermont	X						
Virginia	X						
Washington			X				
West Virginia	X						
Wisconsin			X				
Wyoming	X						

Can the contractor withdraw a bid if the contract award is Not made in the stated time? (Summarized in Table 4)

	Yes	No	No Mention
Alabama			X
Alaska	X		
Arizona	X		
Arkansas	X		
California	X		
Colorado	X		
Connecticut	X		
Delaware			X
Florida	X		
Georgia	X		
Hawaii	X		
Idaho	X		
Illinois	X		
Indiana	X		
Iowa			X
Kansas	X		
Kentucky	X		
Louisiana	X		
Maine			X
Maryland	X		
Massachusetts	X		
Michigan	X		
Minnesota	X		
Mississippi	X		
Missouri			X
Montana	X		
Nebraska	X		
Nevada			X
New Hampshire	X		
New Jersey	X		
New Mexico	X		
New York			X
North Carolina	X		
North Dakota			X
Ohio			X
Oklahoma			X
Oregon	X		
Pennsylvania			X
Rhode Island			X
South Carolina	X		
South Dakota	X		
Tennessee			X
Texas	X		
Utah	X		
Vermont	X		
Virginia	X		
Washington	X		
West Virginia	X		
Wisconsin	X		
Wyoming	X		

How soon after award are bid guarantees of unsuccessful bidders returned? (Summarized in Table 5)

	After Award	After bid opening other than two low bidders	Only checks returned	Other
Alabama		15 DAYS		
Alaska	X			
Arizona			X	
Arkansas			X	
California	10 DAYS			
Colorado			X	
Connecticut	X			
Delaware	X			
Florida		X		
Georgia	X			
Hawaii		X		
Idaho		X		
Illinois				Promptly
Indiana				
Iowa				
Kansas				
Kentucky		5 Days		
Louisiana		15 Days		
Maine			X	
Maryland		X		
Massachusetts		3 DAYS		
Michigan				Promptly
Minnesota		X		
Mississippi			X	
Missouri	X		X	
Montana		X		
Nebraska				
Nevada				
New Hampshire		X		
New Jersey		3 DAYS		
New Mexico	X		X	
New York				
North Carolina			X	
North Dakota		10 DAYS		
Ohio		X		
Oklahoma		X		
Oregon				
Pennsylvania				
Rhode Island		10 DAYS		
South Carolina	X			
South Dakota		X		
Tennessee		X		
Texas		3 DAYS		
Utah	X			
Vermont				AS SOON AS POSSIBLE
Virginia	X			
Washington	X			
West Virginia		X		
Wisconsin		X		
Wyoming		X		

How long does the contractor have to return the signed contract to the agency? (Summarized in Table 6)

	8 Days	10 Days	15 Days	20 Days	Other	Not Stated
Alabama		X				
Alaska			X			
Arizona		X				
Arkansas		X				
California	X					
Colorado			X			
Connecticut		X				
Delaware				X		
Florida				X		
Georgia			X			
Hawaii		X				
Idaho			X			
Illinois			X			
Indiana						X
Iowa			X			
Kansas		X				
Kentucky			X			
Louisiana		X				
Maine			X			
Maryland		X				
Massachusetts			X			
Michigan					28	
Minnesota		X				
Mississippi			X			
Missouri			X			
Montana				X		
Nebraska			X			
Nevada						X
New Hampshire				X		
New Jersey		X				
New Mexico			X			
New York		X				
North Carolina		X				
North Dakota		X				
Ohio		X				
Oklahoma						X
Oregon					12	
Pennsylvania		X				
Rhode Island			X			
South Carolina				X		
South Dakota				X		
Tennessee		X				
Texas			X			
Utah			X			
Vermont			X			
Virginia			X			
Washington				X		
West Virginia				X		
Wisconsin			X			
Wyoming					30	

What is forfeited if the contractor does not return the signed contract within the required number of days? (Summarized in Table 7)

	Bid Guarantee Forfeited as LD's	Bid Difference Forfeited	No Mention	Other
Alabama		X		
Alaska	X			
Arizona	X			
Arkansas	X			
California	X			
Colorado	X			
Connecticut	X			
Delaware	X			
Florida	X			
Georgia	X			
Hawaii	X			
Idaho	X			
Illinois	X			
Indiana			X	BONDS REQUIRED
Iowa	X			
Kansas	X			
Kentucky	X			
Louisiana	X			
Maine	X			
Maryland	X			
Massachusetts	X			
Michigan	X			
Minnesota	X			
Mississippi	X			
Missouri	X			
Montana	X			
Nebraska	X			
Nevada			X	
New Hampshire	X			
New Jersey	X			
New Mexico	X			
New York	X			
North Carolina	X			
North Dakota	X			
Ohio	X			
Oklahoma	X			
Oregon	X			
Pennsylvania	X			
Rhode Island	X			
South Carolina	X			
South Dakota	X			
Tennessee	X			
Texas	X			
Utah	X			
Vermont	X			
Virginia	X			
Washington	X			
West Virginia	X			
Wisconsin	X			
Wyoming	X			

What Is the date of the Notice to Proceed (NTP)?
(Summarized in Table 8)

	When Mailed	When Received	When Signed	Not Stated
Alabama			X	
Alaska		X		
Arizona			X	
Arkansas			X	
California				X
Colorado			X	
Connecticut			X	
Delaware			X	
Florida				X
Georgia		X		
Hawaii			X	
Idaho			X	
Illinois	X			
Indiana			X	
Iowa	X			
Kansas			X	
Kentucky			X	
Louisiana	X			
Maine			X	
Maryland			X	
Massachusetts	X			
Michigan			X	
Minnesota			X	
Mississippi			X	
Missouri	X			
Montana			X	
Nebraska			X	
Nevada			X	
New Hampshire			X	
New Jersey			X	
New Mexico				X
New York				X
North Carolina		X		
North Dakota	X			
Ohio			X	
Oklahoma			X	
Oregon				X
Pennsylvania			X	
Rhode Island	X			
South Carolina			X	
South Dakota	X			
Tennessee			X	
Texas			X	
Utah			X	
Vermont	X			
Virginia			X	
Washington			X	
West Virginia		X		
Wisconsin			X	
Wyoming			X	

What is the Contract Start Date Defined As?
(Summarized in Table 9)

	As Stated In NTP	___ Days after NTP	When Signed	Other
Alabama		15		
Alaska	X			
Arizona	X			
Arkansas			X	
California		15		
Colorado	X			
Connecticut	X			
Delaware	X			
Florida	X			
Georgia		10		
Hawaii	X			
Idaho	X			
Illinois				10 DAYS AFTER SIGNED
Indiana		15		
Iowa		15		
Kansas	X			
Kentucky		31		
Louisiana	X			
Maine	X			
Maryland	X			
Massachusetts				15 DAYS AFTER MAILING
Michigan				10 DAYS AFTER SIGNED
Minnesota	X			
Mississippi	X			
Missouri			X	
Montana	X			
Nebraska	X			
Nevada			X	
New Hampshire	X			
New Jersey			X	
New Mexico	X			
New York				10 DAYS AFTER SIGNED
North Carolina	X			
North Dakota				14 DAYS AFTER NTP
Ohio			X	
Oklahoma			X	
Oregon			X	
Pennsylvania	X			
Rhode Island			X	
South Carolina	X			
South Dakota		10		
Tennessee	X			
Texas		15		
Utah		10		
Vermont	X			
Virginia	X			
Washington				10 DAYS AFTER SIGNED
West Virginia	X			
Wisconsin			X	
Wyoming		10		

When must the contractor submit a schedule for review?
(Summarized in Table 10)

	Prior to starting work	Prior to the Pre-con	___ days after award	No Mention	Other
Alabama		X			
Alaska		X			
Arizona		X			
Arkansas				X	
California			20		
Colorado			10		
Connecticut					14 DAYS AFTER BID OPENING
Delaware					IMMEDIATELY
Florida			30		
Georgia					IMMEDIATELY FOLLOWING NTP
Hawaii			15		
Idaho		X			
Illinois	X				
Indiana			15		
Iowa			15		
Kansas					AS REQUESTED
Kentucky			31		
Louisiana					PRIOR TO NTP
Maine			10		
Maryland			30		
Massachusetts			10		
Michigan					PRIOR TO AWARD
Minnesota	X				
Mississippi		X			
Missouri				X	CONTRACT BY CONTRACT BASIS
Montana				X	
Nebraska			7		
Nevada				X	
New Hampshire		X			
New Jersey	X				
New Mexico	X				
New York	X				
North Carolina		X			7 DAYS PRIOR TO PRE -CON
North Dakota					10 DAYS AFTER BID OPENING
Ohio			15		
Oklahoma	X				
Oregon		X			
Pennsylvania					PROVIDED BY AGENCY
Rhode Island	X				
South Carolina		X			
South Dakota				X	
Tennessee	X				
Texas			15		
Utah	X				
Vermont			10		
Virginia			15		
Washington			10		
West Virginia			15		
Wisconsin		X			
Wyoming	X				

Is a Pre-Construction Conference Required?
(Summarized In Table 11)

	Yes	No
Alabama	X	
Alaska	X	
Arizona	X	
Arkansas	X	
California		X
Colorado		X
Connecticut		X
Delaware		X
Florida	X	
Georgia	X	
Hawaii		X
Idaho	X	
Illinois		X
Indiana	X	
Iowa	X	
Kansas		X
Kentucky	X	
Louisiana		X
Maine	X	
Maryland		X
Massachusetts		X
Michigan	X	
Minnesota		X
Mississippi	X	
Missouri	X	
Montana	X	
Nebraska		X
Nevada		X
New Hampshire	X	
New Jersey		X
New Mexico	X	
New York		X
North Carolina	X	
North Dakota	X	
Ohio	X	
Oklahoma		X
Oregon	X	
Pennsylvania	X	
Rhode Island		X
South Carolina	X	
South Dakota		X
Tennessee	X	
Texas		X
Utah		X
Vermont		X
Virginia	X	
Washington		X
West Virginia	X	
Wisconsin	X	
Wyoming		X

Must all Materials be Tested and Inspected Prior to Incorporation in the Work?
(Summarized In Table 12)

	Yes	No
Alabama	X	
Alaska	X	
Arizona	X	
Arkansas	X	
California	X	
Colorado		X
Connecticut	X	
Delaware	X	
Florida	X	
Georgia	X	
Hawaii	X	
Idaho	X	
Illinois	X	
Indiana	X	
Iowa	X	
Kansas	X	
Kentucky	X	
Louisiana	X	
Maine	X	
Maryland	X	
Massachusetts	X	
Michigan	X	
Minnesota	X	
Mississippi	X	
Missouri	X	
Montana	X	
Nebraska	X	
Nevada		X
New Hampshire	X	
New Jersey	X	
New Mexico	X	
New York	X	
North Carolina	X	
North Dakota	X	
Ohio	X	
Oklahoma	X	
Oregon	X	
Pennsylvania	X	
Rhode Island	X	
South Carolina	X	
South Dakota	X	
Tennessee	X	
Texas	X	
Utah	X	
Vermont	X	
Virginia	X	
Washington		X
West Virginia	X	
Wisconsin	X	
Wyoming	X	

What is the basis of contract time?
(Summarized in Table 13)

	Working Days	Calendar Days	Fixed Completion Date	May use Combination
Alabama	X	X	X	X
Alaska		X	X	X
Arizona	X	X	X	X
Arkansas	X	X	X	X
California	X			
Colorado	X	X		X
Connecticut		X	X	X
Delaware	X	X	X	X
Florida	X	X	X	X
Georgia	X	X	X	X
Hawaii	X	X	X	X
Idaho	X	X	X	X
Illinois	X	X	X	X
Indiana	X	X	X	X
Iowa	X	X	X	X
Kansas	X	X	X	X
Kentucky	X	X	X	X
Louisiana	X	X	X	X
Maine	X	X		X
Maryland	X	X	X	X
Massachusetts		X	X	X
Michigan	X	X		X
Minnesota	X			
Mississippi	X	X	X	X
Missouri	X	X		X
Montana	X	X		X
Nebraska	X			
Nevada		X	X	X
New Hampshire	X		X	X
New Jersey	X	X	X	
New Mexico	X	X	X	X
New York		X		
North Carolina		X		
North Dakota	X	X	X	X
Ohio		X	X	X
Oklahoma	X	X	X	X
Oregon		X	X	X
Pennsylvania		X	X	X
Rhode Island	X	X	X	X
South Carolina		X	X	X
South Dakota	X	X	X	X
Tennessee	X	X	X	X
Texas	X			
Utah	X	X	X	X
Vermont		X	X	X
Virginia		X	X	
Washington	X			
West Virginia	X		X	X
Wisconsin	X	X	X	X
Wyoming	X		X	X

	Does the Contract Have a Winter Exclusion Period? (Summarized in Table 14)			Does work in the period count towards contract time?	
	Yes	No	Period	Yes	No
Alabama		X			
Alaska	X		NOV 1 - APR 30		X
Arizona		X			
Arkansas		X			
California		X			
Colorado	X		1 DEC - 31 MAR		X
Connecticut	X		1 DEC - 31 MAR		X
Delaware	X		16 DEC - 15 MAR		X
Florida		X			
Georgia		X			
Hawaii		X			
Idaho	X		1 DEC - 1 MAR		X
Illinois	X		16 DEC - 30 APR		X
Indiana	X		1 DEC - 31 MAR		X
Iowa	X		15 NOV - 31 MAR		X
Kansas		X			
Kentucky	X		1 DEC - 31 MAR		X
Louisiana		X			
Maine	X		15 NOV - 15 MAR		X
Maryland		X			
Massachusetts		X			
Michigan	X		15 NOV - 15 APR		X
Minnesota	X		15 NOV - 15 APR		X
Mississippi		X			
Missouri	X		15 DEC - 15 MAR		X
Montana	X		16 NOV - 15 APR		X
Nebraska		X			
Nevada		X			
New Hampshire	X		1 DEC - 31 MAR		X
New Jersey		X			
New Mexico		X			
New York	X		1 NOV - 31 MAR		X
North Carolina	X		15 DEC - 15 MAR		X
North Dakota	X		15 NOV - 15 APR		X
Ohio	X		1 DEC - 30 APR		X
Oklahoma		X			
Oregon	X		1 DEC - 1 MAR		X
Pennsylvania		X			
Rhode Island	X		15 DEC - 15 APR		X
South Carolina		X			
South Dakota	X		1 DEC - 31 MAR		X
Tennessee		X			
Texas		X			
Utah	X		1 DEC - 1 MAR		X
Vermont	X		1 DEC - 15 APR	No Work Allowed	
Virginia	X		1 DEC - 31 MAR		X
Washington		X			
West Virginia	X		1 DEC - 31 MAR	X	
Wisconsin		X			
Wyoming	X		1 DEC - 31 MAR		X

May the agency require no work be performed on Sundays?
(Summarized In Table 15)

	Yes	No
Alabama	X	
Alaska	X	
Arizona	X	
Arkansas	X	
California		X
Colorado	X	
Connecticut		X
Delaware	X	
Florida		X
Georgia	X	
Hawaii	X	
Idaho		X
Illinois		X
Indiana	X	
Iowa	X	
Kansas	X	
Kentucky		X
Louisiana		X
Maine	X	
Maryland	X	
Massachusetts		X
Michigan	X	
Minnesota	X	
Mississippi	X	
Missouri		X
Montana	X	
Nebraska		X
Nevada		X
New Hampshire	X	
New Jersey		X
New Mexico		X
New York	X	
North Carolina		X
North Dakota	X	
Ohio		X
Oklahoma		X
Oregon		X
Pennsylvania		X
Rhode Island		X
South Carolina		X
South Dakota	X	
Tennessee		X
Texas	X	
Utah		X
Vermont	X	
Virginia		X
Washington		X
West Virginia	X	
Wisconsin		X
Wyoming	X	

May the agency require no work be performed on Holidays?
(Summarized in Table 15)

	Yes	No
Alabama	X	
Alaska	X	
Arizona	X	
Arkansas	X	
California		X
Colorado	X	
Connecticut		X
Delaware	X	
Florida		X
Georgia	X	
Hawaii	X	
Idaho		X
Illinois		X
Indiana	X	
Iowa	X	
Kansas	X	
Kentucky		X
Louisiana		X
Maine	X	
Maryland	X	
Massachusetts		X
Michigan	X	
Minnesota	X	
Mississippi	X	
Missouri		X
Montana	X	
Nebraska		X
Nevada		X
New Hampshire	X	
New Jersey		X
New Mexico		X
New York	X	
North Carolina		X
North Dakota	X	
Ohio		X
Oklahoma		X
Oregon		X
Pennsylvania		X
Rhode Island		X
South Carolina		X
South Dakota	X	
Tennessee		X
Texas	X	
Utah		X
Vermont	X	
Virginia		X
Washington		X
West Virginia	X	
Wisconsin		X
Wyoming	X	

May the agency require no work be performed on the day prior to or following Holidays? (Summarized in Table 15)

	Yes	No
Alabama		X
Alaska	X	
Arizona		X
Arkansas	X	
California		X
Colorado		X
Connecticut		X
Delaware		X
Florida		X
Georgia		X
Hawaii		X
Idaho		X
Illinois		X
Indiana	X	
Iowa	X	
Kansas	X	
Kentucky		X
Louisiana		X
Maine		X
Maryland	X	
Massachusetts		X
Michigan	X	
Minnesota		X
Mississippi	X	
Missouri		X
Montana	X	
Nebraska		X
Nevada		X
New Hampshire	X	
New Jersey		X
New Mexico		X
New York		X
North Carolina		X
North Dakota		X
Ohio		X
Oklahoma		X
Oregon		X
Pennsylvania		X
Rhode Island		X
South Carolina		X
South Dakota		X
Tennessee		X
Texas	X	
Utah		X
Vermont	X	
Virginia		X
Washington		X
West Virginia		X
Wisconsin		X
Wyoming		X

For a working day contract, does Saturday count as a working day if worked?
(Summarized in Table 16)

	Yes	No	Not Stated	NA
Alabama		X		
Alaska				X
Arizona		X		
Arkansas	X			
California			X	
Colorado	X			
Connecticut				X
Delaware		X		
Florida			X	
Georgia			X	
Hawaii			X	
Idaho		X		
Illinois		X		
Indiana		X		
Iowa		X		
Kansas	X			
Kentucky		X		
Louisiana		X		
Maine	X			
Maryland			X	
Massachusetts				X
Michigan		X		
Minnesota		X		
Mississippi	X			
Missouri		X		
Montana	X			
Nebraska	X			
Nevada			X	
New Hampshire		X		
New Jersey			X	
New Mexico	X			
New York				X
North Carolina				X
North Dakota	X			
Ohio				X
Oklahoma	X			
Oregon				X
Pennsylvania				X
Rhode Island	X			
South Carolina				X
South Dakota	X			
Tennessee			X	
Texas	X			
Utah	X			
Vermont				X
Virginia				X
Washington			X	
West Virginia	X			
Wisconsin			X	
Wyoming	X			

For working day contract, does Sunday or a Holiday count as a working day if worked?
(Summarized in Table 16a)

	Yes	No	NA
Alabama		X	
Alaska			X
Arizona		X	
Arkansas	X		
California	X		
Colorado	X		
Connecticut			X
Delaware		X	
Florida		X	
Georgia		X	
Hawaii	X		
Idaho		X	
Illinois		X	
Indiana	X		
Iowa	X		
Kansas	X		
Kentucky	X		
Louisiana		X	
Maine	X		
Maryland	X		
Massachusetts			X
Michigan	X		
Minnesota		X	
Mississippi	X		
Missouri		X	
Montana	X		
Nebraska	X		
Nevada		X	
New Hampshire	X		
New Jersey		X	
New Mexico	X		
New York			X
North Carolina			X
North Dakota	X		
Ohio			X
Oklahoma	X		
Oregon			X
Pennsylvania			X
Rhode Island		X	
South Carolina			X
South Dakota	X		
Tennessee		X	
Texas	X		
Utah		X	
Vermont			X
Virginia			X
Washington		X	
West Virginia	X		
Wisconsin		X	
Wyoming	X		

For working day contract, how often does the agency submit a record of days charged for the contractor to review? (Summarized in Table 17)

	Weekly	Twice Monthly	Monthly	No Mention	NA
Alabama			X		
Alaska					X
Arizona	X				
Arkansas				X	
California	X				
Colorado	X				
Connecticut					X
Delaware				X	
Florida				X	
Georgia			X		
Hawaii	X				
Idaho			X		
Illinois	X				
Indiana	X				
Iowa	X				
Kansas	X				
Kentucky		X			
Louisiana			X		
Maine	X				
Maryland				X	
Massachusetts					X
Michigan	X				
Minnesota	X				
Mississippi			X		
Missouri	X				
Montana	X				
Nebraska	X				
Nevada				X	
New Hampshire				X	
New Jersey	X				
New Mexico	X				
New York					X
North Carolina					X
North Dakota	X				
Ohio					X
Oklahoma		X			
Oregon					X
Pennsylvania					X
Rhode Island	X				
South Carolina					X
South Dakota		X			
Tennessee	X				
Texas			X		
Utah	X				
Vermont					X
Virginia					X
Washington	X				
West Virginia	X				
Wisconsin	X				
Wyoming	X				

For working day contract, how long does the contractor have to take exception to the agency log of days charged? (Summarized in Table 18)

	One Week	Ten Days	Fifteen Days	No Mention	Other
Alabama					AS SOON AS POSSIBLE
Alaska					
Arizona	X				
Arkansas				X	
California			X		
Colorado					30 DAYS
Connecticut				X	
Delaware				X	
Florida	X				
Georgia	X				
Hawaii	X				
Idaho	X				
Illinois	X				
Indiana	X				
Iowa		X			
Kansas		X			
Kentucky			X		
Louisiana		X			
Maine	X				
Maryland				X	
Massachusetts					
Michigan					21 DAYS
Minnesota				X	
Mississippi			X		
Missouri				X	
Montana		X			
Nebraska			X		
Nevada				X	
New Hampshire				X	
New Jersey	X				
New Mexico	X				
New York					
North Carolina					
North Dakota	X				
Ohio					
Oklahoma		X			
Oregon					
Pennsylvania				X	
Rhode Island	X				
South Carolina					
South Dakota	X				
Tennessee	X				
Texas		X			
Utah	X				
Vermont					
Virginia					
Washington		X			
West Virginia	X				
Wisconsin	X				
Wyoming				X	

For working day contract, are weather delays excluded from time charges?
(Summarized in Table 19)

	Yes	No	No Mention	NA
Alabama	X			
Alaska				X
Arizona	X			
Arkansas	X			
California	X			
Colorado	X			
Connecticut				X
Delaware	X			
Florida			X	
Georgia	X			
Hawaii			X	
Idaho	X			
Illinois	X			
Indiana	X			
Iowa	X			
Kansas	X			
Kentucky	X			
Louisiana	X			
Maine	X			
Maryland			X	
Massachusetts				X
Michigan	X			
Minnesota	X			
Mississippi	X			
Missouri	X			
Montana	X			
Nebraska	X			
Nevada			X	
New Hampshire			X	
New Jersey	X			
New Mexico	X			
New York				X
North Carolina				X
North Dakota	X			
Ohio				X
Oklahoma			X	
Oregon				X
Pennsylvania				X
Rhode Island	X			
South Carolina				X
South Dakota	X			
Tennessee	X			
Texas	X			
Utah	X			
Vermont				X
Virginia				X
Washington	X			
West Virginia		X		
Wisconsin	X			
Wyoming		X		

In the case of differing site conditions must the contractor Notify the agency prior to distrubing? (Summarized In Table 20)

	Yes	No	No Mention
Alabama	X		
Alaska	X		
Arizona	X		
Arkansas	X		
California	X		
Colorado	X		
Connecticut			X
Delaware	X		
Florida	X		
Georgia			X
Hawaii	X		
Idaho	X		
Illinois	X		
Indiana	X		
Iowa	X		
Kansas	X		
Kentucky			X
Louisiana	X		
Maine	X		
Maryland	X		
Massachusetts	X		
Michigan	X		
Minnesota	X		
Mississippi	X		
Missouri	X		
Montana	X		
Nebraska	X		
Nevada			X
New Hampshire	X		
New Jersey	X		
New Mexico	X		
New York			X
North Carolina	X		
North Dakota	X		
Ohio	X		
Oklahoma	X		
Oregon	X		
Pennsylvania			X
Rhode Island			X
South Carolina	X		
South Dakota			X
Tennessee	X		
Texas	X		
Utah	X		
Vermont	X		
Virginia	X		
Washington	X		
West Virginia	X		
Wisconsin	X		
Wyoming	X		

Does the contract allow for adjustment of time and price for differing site conditions? (Summarized in Table 21)

	Differing Site Conditions Clause			Adjustment to Contract Price & Time	
	Yes	No	Std Clause	Yes	No
Alabama	X		X	X	
Alaska	X			X	
Arizona	X		X	X	
Arkansas	X		X	X	
California	X		X	X	
Colorado	X		X	X	
Connecticut		X		X	
Delaware	X		X	X	
Florida	X		X	X	
Georgia		X		X	
Hawaii	X		X	X	
Idaho	X		X	X	
Illinois	X		X	X	
Indiana	X		X	X	
Iowa	X		X	X	
Kansas	X		X	X	
Kentucky		X		X	
Louisiana	X		X	X	
Maine	X		X	X	
Maryland	X		X	X	
Massachusetts	X			X	
Michigan	X		X	X	
Minnesota	X		X	X	
Mississippi	X		X	X	
Missouri	X		X	X	
Montana	X		X	X	
Nebraska	X		X	X	
Nevada		X		X	
New Hampshire	X		X	X	
New Jersey	X			X	
New Mexico	X		X	X	
New York		X			X
North Carolina	X				
North Dakota	X				
Ohio	X		X	X	
Oklahoma	X		X	X	
Oregon	X		X		
Pennsylvania		X		X	
Rhode Island		X		X	
South Carolina	X		X	X	
South Dakota		X		X	
Tennessee	X		X	X	
Texas	X		X	X	
Utah	X		X	X	
Vermont	X		X	X	
Virginia	X		X	X	
Washington	X			X	
West Virginia	X		X	X	
Wisconsin	X		X	X	
Wyoming	X		X	X	

Is Adverse Weather Defined? (Summarized in Table 22)

	Yes	No
Alabama		X
Alaska		X
Arizona		X
Arkansas		X
California		X
Colorado		X
Connecticut		X
Delaware		X
Florida	X	
Georgia		X
Hawaii		X
Idaho		X
Illinois		
Indiana	X	
Iowa		X
Kansas		X
Kentucky		X
Louisiana		X
Maine		X
Maryland		X
Massachusetts	X	
Michigan		X
Minnesota		X
Mississippi		X
Missouri		X
Montana		X
Nebraska		X
Nevada		X
New Hampshire		X
New Jersey		X
New Mexico		X
New York		X
North Carolina		X
North Dakota		X
Ohio	X	
Oklahoma		X
Oregon		X
Pennsylvania		X
Rhode Island		X
South Carolina		X
South Dakota		X
Tennessee		X
Texas		X
Utah		X
Vermont		X
Virginia		X
Washington		X
West Virginia		X
Wisconsin		X
Wyoming		X

Are time extensions allowed?
(Summarized in Table 23)

	Yes	No
Alabama	X	
Alaska	X	
Arizona	X	
Arkansas	X	
California	X	
Colorado	X	
Connecticut	X	
Delaware	X	
Florida	X	
Georgia	X	
Hawaii	X	
Idaho	X	
Illinois	X	
Indiana	X	
Iowa	X	
Kansas	X	
Kentucky	X	
Louisiana	X	
Maine	X	
Maryland	X	
Massachusetts	X	
Michigan	X	
Minnesota	X	
Mississippi	X	
Missouri	X	
Montana	X	
Nebraska	X	
Nevada	X	
New Hampshire	X	
New Jersey	X	
New Mexico	X	
New York	X	
North Carolina	X	
North Dakota	X	
Ohio	X	
Oklahoma	X	
Oregon	X	
Pennsylvania	X	
Rhode Island	X	
South Carolina	X	
South Dakota	X	
Tennessee	X	
Texas	X	
Utah	X	
Vermont	X	
Virginia	X	
Washington	X	
West Virginia	X	
Wisconsin	X	
Wyoming	X	

When are requests for additional contract time due?

	Within ____ days of start of delay	Within ___ days of end of delay	Anytime Prior to completion	No time stated
Alabama				X
Alaska	10			
Arizona		10		
Arkansas				X
California		7		
Colorado	30			
Connecticut			X	
Delaware			X	
Florida			X	
Georgia	15			
Hawaii	90			
Idaho				X
Illinois				X
Indiana			X	
Iowa		7		
Kansas			X	
Kentucky	14			
Louisiana			X	
Maine			X	
Maryland	10			
Massachusetts				X
Michigan		7		
Minnesota				X
Mississippi				X
Missouri				X
Montana				X
Nebraska			X	
Nevada				X
New Hampshire			X	
New Jersey	15			
New Mexico			X	
New York				X
North Carolina			X	
North Dakota			X	
Ohio		30		
Oklahoma			X	
Oregon			X	
Pennsylvania			X	
Rhode Island			X	
South Carolina			X	
South Dakota			X	
Tennessee			X	
Texas				X
Utah			X	
Vermont			X	
Virginia				X
Washington		10		
West Virginia				X
Wisconsin			X	
Wyoming		10		

Will the contract time be extended for weather delays?
(Summarized in Table 23)

	Yes	No	COMMENTS
Alabama	X		
Alaska	X		
Arizona	X		
Arkansas	X		
California	X		
Colorado	X		
Connecticut		X	
Delaware	X		
Florida	X		
Georgia	X		
Hawaii	X		
Idaho		X	
Illinois	X		
Indiana		X	
Iowa	X		
Kansas	X		
Kentucky		X	
Louisiana	X		
Maine	X		
Maryland	X		
Massachusetts	X		
Michigan	X		
Minnesota	X		
Mississippi	X		
Missouri	X		
Montana	X		
Nebraska	X		
Nevada	X		
New Hampshire	X		
New Jersey	X		
New Mexico	X		
New York	X		
North Carolina		X	
North Dakota	X		
Ohio	X		
Oklahoma	X		
Oregon	X		
Pennsylvania		X	
Rhode Island	X		
South Carolina		X	
South Dakota	X		
Tennessee	X		
Texas	X		
Utah	X		
Vermont	X		
Virginia	X		
Washington	X		
West Virginia		X	
Wisconsin	X		
Wyoming	X		

Are claims allowed? (Summarized in Table 24)

	Yes	No	No CLAUSE
Alabama	X		
Alaska	X		
Arizona	X		
Arkansas	X		
California	X		
Colorado	X		
Connecticut			X
Delaware	X		
Florida	X		
Georgia	X		
Hawaii	X		
Idaho	X		
Illinois			X
Indiana	X		
Iowa	X		
Kansas	X		
Kentucky	X		
Louisiana	X		
Maine	X		
Maryland	X		
Massachusetts	X		
Michigan	X		
Minnesota	X		
Mississippi	X		
Missouri	X		
Montana	X		
Nebraska			X
Nevada			X
New Hampshire	X		
New Jersey	X		
New Mexico	X		
New York	X		
North Carolina	X		
North Dakota	X		
Ohio	X		
Oklahoma	X		
Oregon	X		
Pennsylvania	X		
Rhode Island	X		
South Carolina	X		
South Dakota	X		
Tennessee	X		
Texas			X
Utah	X		
Vermont	X		
Virginia	X		
Washington	X		
West Virginia	X		
Wisconsin	X		
Wyoming	X		

When must claims be submitted to the agency?
(Summarized in Table 25)

	Notice prior to performing disputed work	Proposal due within ___ days of knowing cost	Other
Alabama	X		
Alaska	X	60	
Arizona	X	60	
Arkansas	X		
California			NOTICE WITHIN 15 DAYS OF EVENT
Colorado			NOTICE WITHIN 15 DAYS OF EVENT
Connecticut			No CLAIMS CLAUSE
Delaware	X	60	
Florida	X		
Georgia	X	60	
Hawaii	X	30	
Idaho	X		
Illinois			No CLAIMS CLAUSE
Indiana	X		
Iowa	X		
Kansas	X	10	
Kentucky	X		
Louisiana	X		
Maine	X	60	
Maryland	X	30	
Massachusetts	X		
Michigan	X	60	
Minnesota	X		
Mississippi	X		
Missouri	X		
Montana	X	30	
Nebraska			No CLAIMS CLAUSE
Nevada			No CLAIMS CLAUSE
New Hampshire	X		
New Jersey	X		
New Mexico	X		
New York	X		
North Carolina	X	120	
North Dakota	X	120	
Ohio	X		
Oklahoma	X	30	
Oregon	X		
Pennsylvania	X		
Rhode Island	X		
South Carolina	X		
South Dakota	X		
Tennessee	X	60	
Texas			No CLAIMS CLAUSE
Utah	X		
Vermont	X		
Virginia	X		
Washington	X	30	
West Virginia	X		
Wisconsin	X		
Wyoming	X	60	

Can the agency suspend work?
(Summarized in Table 26)

	Yes	No	Standard Clause	Proposal Due in ___ days
Alabama	X			
Alaska	X			
Arizona	X		X	7
Arkansas	X			
California	X		X	7
Colorado	X		X	7
Connecticut	X			
Delaware	X		X	7
Florida	X			
Georgia	X		X	7
Hawaii	X			
Idaho	X		X	7
Illinois	X		X	7
Indiana	X		X	7
Iowa	X		X	7
Kansas	X		X	7
Kentucky	X			
Louisiana	X		X	7
Maine	X		X	7
Maryland	X			20
Massachusetts	X			30
Michigan	X		X	7
Minnesota	X		X	7
Mississippi	X		X	7
Missouri	X		X	7
Montana	X		X	7
Nebraska	X		X	7
Nevada				
New Hampshire	X		X	7
New Jersey	X			10
New Mexico	X		X	7
New York	X			
North Carolina	X			14
North Dakota	X		X	7
Ohio	X			
Oklahoma	X			
Oregon	X		X	7
Pennsylvania	X			
Rhode Island	X			
South Carolina	X		X	7
South Dakota	X			
Tennessee	X		X	7
Texas	X		X	7
Utah	X		X	7
Vermont	X		X	7
Virginia	X		X	7
Washington	X			
West Virginia	X		X	7
Wisconsin	X		X	7
Wyoming	X		X	7

Is there a clause for suspension of work if historical or archeological finds encountered? (Summarized in Table 27)

	Yes	No
Alabama		X
Alaska	X	
Arizona	X	
Arkansas		X
California		X
Colorado	X	
Connecticut	X	
Delaware	X	
Florida		X
Georgia	X	
Hawaii	X	
Idaho	X	
Illinois	X	
Indiana		X
Iowa		X
Kansas	X	
Kentucky		X
Louisiana	X	
Maine	X	
Maryland		X
Massachusetts	X	
Michigan	X	
Minnesota	X	
Mississippi		X
Missouri		X
Montana	X	
Nebraska	X	
Nevada		X
New Hampshire	X	
New Jersey	X	
New Mexico	X	
New York		X
North Carolina		X
North Dakota	X	
Ohio		X
Oklahoma		X
Oregon		X
Pennsylvania	X	
Rhode Island		X
South Carolina	X	
South Dakota	X	
Tennessee		X
Texas	X	
Utah	X	
Vermont	X	
Virginia		X
Washington		X
West Virginia		X
Wisconsin		X
Wyoming		X

	Are liquidated damages included in Provisions? (Summarized in Table 28)		Separate values for calendar day vs working or completion date?		
	Yes	No	Yes	No	NA
Alabama	X		X		
Alaska	X			X	
Arizona	X		X		
Arkansas	X		X		
California	X				X
Colorado	X			X	
Connecticut	X		X		
Delaware	X		X		
Florida	X			X	
Georgia	X		X		
Hawaii	X			X	
Idaho	X			X	
Illinois	X		X		
Indiana	X		X		
Iowa	X			X	
Kansas	X			X	
Kentucky	X			X	
Louisiana	X		X		
Maine	X		X		
Maryland	X			X	
Massachusetts	X			X	
Michigan	X			X	
Minnesota	X				X
Mississippi	X		X		
Missouri	X			X	
Montana	X		X		
Nebraska	X				X
Nevada	X			X	
New Hampshire	X		X		
New Jersey	X		X		
New Mexico	X		X		
New York	X				X
North Carolina	X				X
North Dakota	X		X		
Ohio	X			X	
Oklahoma	X			X	
Oregon	X			X	
Pennsylvania	X		X		
Rhode Island	X		X		
South Carolina	X			X	
South Dakota	X			X	
Tennessee	X		X		
Texas	X				X
Utah	X		X		
Vermont	X			X	
Virginia	X			X	
Washington	X				X
West Virginia	X			X	
Wisconsin	X			X	
Wyoming	X			X	

How quickly must the contractor respond to Notice of inadequate maintenance of project? (Summarized in Table 29)

	Immediately	24 Hours	48 Hours	No Mention	Other
Alabama		X			
Alaska				X	
Arizona		X			
Arkansas		X			
California				X	
Colorado		X			
Connecticut				X	
Delaware				X	
Florida			X		
Georgia			X		
Hawaii		X			
Idaho	X				
Illinois				X	
Indiana		X			
Iowa				X	
Kansas		X			
Kentucky				X	
Louisiana		X			
Maine	X				
Maryland		X			
Massachusetts				X	
Michigan				X	
Minnesota		X			
Mississippi		X			
Missouri				X	
Montana		X			
Nebraska				X	
Nevada				X	
New Hampshire					WITHIN SPECIFIED TIME
New Jersey		X			
New Mexico	X				
New York				X	
North Carolina		X			
North Dakota				X	
Ohio		X			
Oklahoma		X			
Oregon		X			
Pennsylvania				X	
Rhode Island		X			
South Carolina		X			
South Dakota		X			
Tennessee		X			
Texas				X	
Utah		X			
Vermont				X	
Virginia				X	
Washington				X	
West Virginia		X			
Wisconsin				X	
Wyoming		X			

Can the agency terminate the contract for convenience?
(Summarized in Table 30)

	Yes	No	COMMENTS
Alabama	X		
Alaska	X		
Arizona	X		
Arkansas	X		
California	X		
Colorado	X		
Connecticut	X		
Delaware	X		
Florida	X		
Georgia	X		
Hawaii	X		
Idaho	X		
Illinois	X		
Indiana		X	
Iowa	X		NATIONAL EMERGENCY ONLY
Kansas	X		
Kentucky	X		
Louisiana	X		
Maine	X		
Maryland	X		
Massachusetts	X		
Michigan	X		
Minnesota	X		NATIONAL EMERGENCY ONLY
Mississippi	X		
Missouri		X	
Montana	X		
Nebraska	X		
Nevada		X	
New Hampshire	X		
New Jersey	X		
New Mexico	X		
New York	X		
North Carolina		X	
North Dakota	X		
Ohio	X		
Oklahoma	X		
Oregon	X		
Pennsylvania	X		
Rhode Island		X	
South Carolina	X		
South Dakota	X		NATIONAL EMERGENCY ONLY
Tennessee	X		
Texas	X		NATIONAL EMERGENCY ONLY
Utah	X		
Vermont	X		NATIONAL EMERGENCY ONLY
Virginia	X		
Washington	X		
West Virginia	X		
Wisconsin	X		
Wyoming	X		

How long does the contractor have to respond to/or correct deficiencies prior to agency terminating contract? (Summarized in Table 31)

	___ day Notice to Contractor	No Notice period stated
Alabama	10	
Alaska		X
Arizona	10	
Arkansas	10	
California		X
Colorado	10	
Connecticut	10	
Delaware	10	
Florida	10	
Georgia	10	
Hawaii	10	
Idaho	10	
Illinois	10	
Indiana	10	
Iowa		X
Kansas	10	
Kentucky	10	
Louisiana	10	
Maine	10	
Maryland		X
Massachusetts	5	
Michigan	10	
Minnesota	10	
Mississippi	15	
Missouri	10	
Montana	10	
Nebraska	10	
Nevada		X
New Hampshire	10	
New Jersey	10	
New Mexico	10	
New York		X
North Carolina	7	
North Dakota	10	
Ohio		X
Oklahoma	10	
Oregon	10	
Pennsylvania	10	
Rhode Island	10	
South Carolina	15	
South Dakota	10	
Tennessee	15	
Texas	10	
Utah	10	
Vermont	10	
Virginia	10	
Washington		X
West Virginia	10	
Wisconsin	10	
Wyoming	10	

How long does the surety have to take over work prior to agency performing or having work performed by others? (Summarized in Table 32)

	___ day Notice to surety	No MENTION
Alabama		X
Alaska		X
Arizona		X
Arkansas		X
California		X
Colorado		X
Connecticut		X
Delaware	10	
Florida		X
Georgia	10	
Hawaii		X
Idaho		X
Illinois		X
Indiana		X
Iowa		X
Kansas		X
Kentucky		X
Louisiana		X
Maine		X
Maryland		X
Massachusetts		X
Michigan		X
Minnesota		X
Mississippi	20	
Missouri		X
Montana		X
Nebraska		X
Nevada		X
New Hampshire		X
New Jersey		X
New Mexico		X
New York		X
North Carolina		X
North Dakota		X
Ohio		X
Oklahoma		X
Oregon		X
Pennsylvania		X
Rhode Island		X
South Carolina	30	
South Dakota		X
Tennessee		X
Texas		X
Utah		X
Vermont		X
Virginia		X
Washington		X
West Virginia		X
Wisconsin		X
Wyoming		X

How often are progress payments made? (Summarized in Table 33)

	Monthly	Twice Monthly	Bi-Weekly	Other
Alabama	X			
Alaska		X		
Arizona	X			
Arkansas		X		
California	X			
Colorado	X			
Connecticut	X			
Delaware	X			
Florida	X			
Georgia	X			
Hawaii	X			
Idaho	X			
Illinois	X			
Indiana	X			
Iowa	X			
Kansas	X			
Kentucky		X		
Louisiana	X			
Maine	X			
Maryland	X			
Massachusetts			X	
Michigan			X	
Minnesota	X			
Mississippi	X			
Missouri				
Montana			X	
Nebraska		X		
Nevada				NOT STATED
New Hampshire	X			
New Jersey	X			
New Mexico	X			
New York				
North Carolina		X		
North Dakota		X		
Ohio	X			
Oklahoma	X			
Oregon	X			
Pennsylvania	X			
Rhode Island	X			
South Carolina	X			
South Dakota	X			
Tennessee	X			
Texas	X			
Utah	X			
Vermont		X		
Virginia	X			
Washington	X			
West Virginia	X			
Wisconsin		X		
Wyoming	X			

X. APPENDIX B

SUMMARY SHEETS FOR OTHER AGENCIES

Are Holidays listed in the contract and if so, how many holidays does the agency observe? (Summarized In Table 1)

	Listed	#Holidays	Not Listed	Unusual Days
Chicago		5		Good Friday
Cincinnati			X	
Dallas			X	
Detroit			X	
El Paso		9		Day After Thanksgiving
Honolulu			X	
Los Angeles			X	
Louisville			X	
Milwaukee			X	
San Francisco			X	
Seattle		10		
Tampa			X	
Tulsa			X	
U. S. BLM			X	
U. S. Navy			X	
AIA			X	

May the Contractor Withdraw or Modify a bid any time prior to bid opening?
(Summarized in Table 2)

	Yes	No	Other
Chicago	X		
Cincinnati	X		
Dallas	X		
Detroit			No Mention
El Paso			No Mention
Honolulu	X		
Los Angeles			No Mention
Louisville	X		
Milwaukee	X		
San Francisco			No Mention
Seattle	X		
Tampa			No Mention
Tulsa	X		
U. S. BLM	X		
U. S. Navy	X		
AIA			No Mention

How long after bid opening can the agency award the contract?
(Summarized in Table 3)

	30 Days	40 Days	45 Days	50 Days	60 Days	90 Days	Not listed or other
Chicago					X		
Cincinnati							X
Dallas							X
Detroit							X
El Paso							X
Honolulu							X
Los Angeles							X
Louisville							X
Milwaukee			X				
San Francisco		X					
Seattle					X		
Tampa					X		
Tulsa							X
U. S. BLM					X		
U. S. Navy					X		
AIA							X

Can the contractor withdraw a bid if the contract award is not made in the stated time? (Summarized in Table 4)

	Yes	No	No Mention
Chicago			X
Cincinnati			X
Dallas			X
Detroit			X
El Paso			X
Honolulu			X
Los Angeles			X
Louisville			X
Milwaukee			X
San Francisco			X
Seattle	X		
Tampa	X		
Tulsa			X
U. S. BLM	X		
U. S. Navy	X		
AIA			X

How soon after award are bid guarantees of unsuccessfull bidders returned? (Summarized in Table 5)

	Upon award	After bid opening other than two low bidders	Only checks returned	Not mentioned
Chicago		20 DAYS		
Cincinnati		X		
Dallas	X			
Detroit				X
El Paso				X
Honolulu	X			
Los Angeles	X			
Louisville				X
Milwaukee				X
San Francisco	X			
Seattle	X		X	
Tampa		10 DAYS		
Tulsa		X		
U. S. BLM	X			
U. S. Navy	X			
AIA				X

How long does the contractor have to return the signed contract to the agency? (Summarized in Table 6)

	8 Days	10 Days	15 Days	20 Days	Other	Not Stated
Chicago					13 DAYS	
Cincinnati		X				
Dallas		X				
Detroit						X
El Paso					12 DAYS	
Honolulu		X				
Los Angeles					30 DAYS	
Louisville		X				
Milwaukee		X				
San Francisco		X				
Seattle					14DAYS	
Tampa		X				
Tulsa		X				
U. S. BLM			X			
U. S. Navy			X			
AIA						X

What is forfeited if the contractor does not return the signed contract within the required number of days? (Summarized in Table 7)

	Bid Guarantee Forfeited as LD's	Bid Difference Forfeited	No Mention	Other
Chicago	X			
Cincinnati	X			
Dallas	X			
Detroit			X	
El Paso	X			
Honolulu	X			
Los Angeles	X			
Louisville			X	
Milwaukee	X			
San Francisco	X			
Seattle	X			
Tampa	X			
Tulsa	X			
U. S. BLM		X		
U. S. Navy		X		
AIA			X	

What is the date of the Notice to Proceed (NTP)?
(Summarized in Table 8)

	When Mailed	When Received	When Signed	Not Stated
Chicago			X	
Cincinnati				X
Dallas			X	
Detroit				X
El Paso				X
Honolulu			X	
Los Angeles	X			
Louisville			X	
Milwaukee			X	
San Francisco				X
Seattle			X	
Tampa	X			
Tulsa				X
U. S. BLM	X			
U. S. Navy	X			
AIA				X

What is the Contract Start Date Defined As?
(Summarized in Table 9)

	As stated in NTP	___ Days after NTP	When Signed
Chicago	X		
Cincinnati	X		
Dallas	X		
Detroit	X		
El Paso	X		
Honolulu	X		
Los Angeles	X		
Louisville		10	
Milwaukee	X		
San Francisco	X		
Seattle		10	
Tampa		30	
Tulsa			X
U. S. BLM		15	
U. S. Navy		15	
AIA	X		

When must the contractor submit a schedule for review? (Summarized in Table 10)

	Prior to starting work	At the PRE-CON	___ days after award	No Mention	Other
Chicago					10 DAYS AFTER STARTING
Cincinnati			15		
Dallas					IMMEDIATELY UPON AWARD
Detroit				X	
El Paso	X				
Honolulu			7		
Los Angeles	X				
Louisville				X	
Milwaukee				X	
San Francisco	X				
Seattle			14		
Tampa			15		
Tulsa	X				
U. S. BLM			15		
U. S. Navy			15		
AIA					PROMPTLY AFTER AWARD

Is a Pre-Construction Conference Required? (Summarized in Table 11)

	Yes	No
Chicago		X
Cincinnati	X	
Dallas		X
Detroit		X
El Paso		X
Honolulu		X
Los Angeles	X	
Louisville	X	
Milwaukee		X
San Francisco		X
Seattle	X	
Tampa	X	
Tulsa		X
U. S. BLM	X	
U. S. Navy	X	
AIA		X

Must all Materials be Tested and Inspected Prior to Incorporation in the Work?
(Summarized In Table 12)

	Yes	No	No Mention
Chicago		X	
Cincinnati	X		
Dallas			X
Detroit	X		
El Paso	X		
Honolulu			X
Los Angeles	X		
Louisville	X		
Milwaukee	X		
San Francisco	X		
Seattle	X		
Tampa	X		
Tulsa	X		
U. S. BLM		X	
U. S. Navy		X	
AIA	X		

What is the basis of contract time? (Summarized in Table 13)

	Working Days	Calendar Days	Fixed Completion Date	May use Combiation
Chicago	X			
Cincinnati		X	X	X
Dallas		X		
Detroit		X		
El Paso		X		
Honolulu		X		
Los Angeles	X			
Louisville		X		
Milwaukee	X	X	X	X
San Francisco	X			
Seattle	X			
Tampa		X		
Tulsa	X	X	X	X
U. S. BLM		X		
U. S. Navy		X		
AIA		X		

Does the Contract Have a Winter Exclusion Period? (Summarized in Table 14)

	Yes	No	Period
Chicago	X		16 DEC - 14 MAR
Cincinnati	X		1 DEC - APR 30
Dallas		X	
Detroit		X	
El Paso		X	
Honolulu		X	
Los Angeles		X	
Louisville		X	
Milwaukee		X	
San Francisco		X	
Seattle		X	
Tampa		X	
Tulsa		X	
U. S. BLM		X	
U. S. Navy		X	
AIA		X	

May the agency require no work be performed on Sundays?
(Summarized In Table 15)

	yes	no
Chicago	X	
Cincinnati		X
Dallas		X
Detroit		X
El Paso	X	
Honolulu	X	
Los Angeles	X	
Louisville		X
Milwaukee	X	
San Francisco	X	
Seattle	X	
Tampa		X
Tulsa		X
U. S. BLM	X	
U. S. Navy	X	
AIA		X

May the agency require no work be performed on Holidays?
(Summarized In Table 15)

	yes	no
Chicago	X	
Cincinnatl		X
Dallas		X
Detroit		X
El Paso	X	
Honolulu	X	
Los Angeles	X	
Louisville		X
Milwaukee	X	
San Francisco	X	
Seattle	X	
Tampa		X
Tulsa		X
U. S. BLM	X	
U. S. Navy	X	
AIA		X

May the agency require no work be performed on the day prior to or following Holidays? (Summarized in Table 15)

	yes	no
Chicago		X
Cincinnati		X
Dallas		X
Detroit		X
El Paso		X
Honolulu		X
Los Angeles		X
Louisville		X
Milwaukee		X
San Francisco		X
Seattle		X
Tampa		X
Tulsa		X
U. S. BLM		X
U. S. Navy		X
AIA		X

For working day contract, does Saturday count as a working day if worked?
(Summarized in Table 16)

	yes	no	Not Stated	NA
Chicago			X	
Cincinnati				X
Dallas				X
Detroit				X
El Paso				X
Honolulu				X
Los Angeles			X	
Louisville				X
Milwaukee			X	
San Francisco			X	
Seattle	X			
Tampa				X
Tulsa	X			
U. S. BLM				X
U. S. Navy				X
AIA				X

For working day contract, does Sunday or a Holiday count as a working day if worked?
(Summarized in Table 16a)

	yes	no	NA
Chicago	X		
Cincinnati			X
Dallas			X
Detroit			X
El Paso			X
Honolulu			X
Los Angeles	X		
Louisville			X
Milwaukee	X		
San Francisco	X		
Seattle		X	
Tampa			X
Tulsa		X	
U. S. BLM			X
U. S. Navy			X
AIA			X

For working day contract, how often does the agency submit a record of days charged for the contractor to review? (Summarized in Table 17)

	Weekly	Twice Monthly	Monthly	No Mention	NA	Other
Chicago				X		
Cincinnati					X	
Dallas					X	
Detroit					X	
El Paso					X	
Honolulu					X	
Los Angeles						PERODIC
Louisville					X	
Milwaukee				X		
San Francisco	X					
Seattle	X					
Tampa					X	
Tulsa		X				
U. S. BLM					X	
U. S. Navy					X	
AIA					X	

For working day contract, how long does the contractor have to take exception to the agency log of days charged? (Summarized in Table 18)

	One Week	Ten Days	Fifteen Days	No Mention	NA
Chicago				X	X
Cincinnati					X
Dallas					X
Detroit					X
El Paso					X
Honolulu					X
Los Angeles			X		
Louisville					X
Milwaukee				X	
San Francisco			X		
Seattle			X		
Tampa					X
Tulsa				X	
U. S. BLM					X
U. S. Navy					X
AIA					X

For working day contract, are weather delays excluded from time charges?
(Summarized in Table 19)

	Yes	No	No Mention	NA
Chicago	X			
Cincinnati				X
Dallas				X
Detroit				X
El Paso				X
Honolulu				X
Los Angeles	X			
Louisville				X
Milwaukee				X
San Francisco	X			
Seattle	X			
Tampa				X
Tulsa	X			
U. S. BLM				X
U. S. Navy				X
AIA				X

In the case of differing site conditons must the contractor notify the agency prior to distrubing? (Summarized In Table 20)

	Yes	No	NO CLAUSE
Chicago			X
Cincinnati	X		
Dallas			X
Detroit	X		
El Paso	X		
Honolulu	X		
Los Angeles	X		
Louisville	X		
Milwaukee			X
San Francisco			X
Seattle	X		
Tampa			X
Tulsa	X		
U. S. BLM	X		
U. S. Navy	X		
AIA	X		

Does the contract allow for adjustment of time and price for differing site conditions? (Summarized in Table 21)

	Differing Site Conditions Clause			Adjustment to Contract Price & Time	
	Yes	No	Std Clause	Yes	No
Chicago		X			
Cincinnati	X			X	
Dallas		X			X
Detroit	X			X	
El Paso	X			X	
Honolulu	X			X	
Los Angeles	X			X	
Louisville	X			X	
Milwaukee		X			
San Francisco		X			
Seattle	X		X	X	
Tampa		X			
Tulsa	X			X	
U. S. BLM	X			X	
U. S. Navy	X			X	
AIA	X			X	

Is Adverse Weather Defined? (Summarized in Table 22)

	Yes	No
Chicago		X
Cincinnati	X	
Dallas		X
Detroit	X	
El Paso		X
Honolulu		X
Los Angeles		X
Louisville		X
Milwaukee		X
San Francisco		X
Seattle	X	
Tampa	X	
Tulsa		X
U. S. BLM	X	
U. S. Navy	X	
AIA	X	

Are time extensions allowed? (Summarized in Table 23)

	Yes	No
Chicago	X	
Cincinnati	X	
Dallas	X	
Detroit	X	
El Paso	X	
Honolulu	X	
Los Angeles	X	
Louisville	X	
Milwaukee	X	
San Francisco	X	
Seattle	X	
Tampa	X	
Tulsa	X	
U. S. BLM	X	
U. S. Navy	X	
AIA	X	

When are requests for additional contract time due?

	Within ____ days of start of delay	Within ___ days of end of delay	Anytime Prior to completion	No time stated
Chicago		10		
Cincinnati	10			
Dallas				X
Detroit	5			
El Paso		10		
Honolulu	7			
Los Angeles	30			
Louisville	5			
Milwaukee			X	
San Francisco			X	
Seattle		5		
Tampa		7		
Tulsa			X	
U. S. BLM	10			
U. S. Navy	10			
AIA	21			

Will the contract time be extended for weather delays? (Summarized in Table 23)

	Yes	No
Chicago	X	
Cincinnati	X	
Dallas	X	
Detroit	X	
El Paso	X	
Honolulu	X	
Los Angeles	X	
Louisville	X	
Milwaukee	X	
San Francisco	X	
Seattle	X	
Tampa	X	
Tulsa	X	
U. S. BLM	X	
U. S. Navy	X	
AIA	X	

Are claims allowed? (Summarized in Table 24)

	Yes	No	Comments
Chicago	X		
Cincinnati	X		
Dallas	X		
Detroit	X		
El Paso		X	
Honolulu	X		
Los Angeles	X		
Louisville	X		
Milwaukee	X		
San Francisco	X		
Seattle	X		
Tampa	X		
Tulsa	X		
U. S. BLM	X		
U. S. Navy	X		
AIA	X		

When must claims be submitted to the agency? (Summarized in Table 25)

	Notice prior to performing disputed work	Proposal due within ___ days of knowing cost	No timeframe stated
Chicago			X
Cincinnati	NOTICE DUE WITHIN 10 DAYS OF START OF DISPUTE		
Dallas		7	
Detroit	NOTICE DUE WITHIN 5 DAYS OF ORDER		
El Paso			X
Honolulu	NOTICE DUE WITHIN 10 DAYS OF DIRECTION		
Los Angeles	X		
Louisville	X		
Milwaukee	NOT LATER THAN 5 DAYS AFTER COMPLETION		
San Francisco	X		
Seattle		30	
Tampa	X		
Tulsa			X
U. S. BLM			X
U. S. Navy			X
AIA	X		

Can the agency suspend work? (Summarized in Table 26)

	Yes	No	Standard Clause	Proposal Due in ___ days
Chicago		X		
Cincinnati	X			
Dallas		X		
Detroit	X			
El Paso		X		
Honolulu	X			
Los Angeles	X			
Louisville		X		
Milwaukee	X			
San Francisco		X		
Seattle	X			
Tampa	X			
Tulsa	X			
U. S. BLM	X			10
U. S. Navy	X			10
AIA	X			

Is there a clause for suspension of work if historical or archeological finds encountered? (Summarized in Table 27)

	Yes	No
Chicago		X
Cincinnati		X
Dallas		X
Detroit		X
El Paso		X
Honolulu	X	
Los Angeles	X	
Louisville		X
Milwaukee		X
San Francisco		X
Seattle	X	
Tampa		X
Tulsa		X
U. S. BLM		X
U. S. Navy		X
AIA		X

	Are liquidated damages included in Provisions? (Summarized in Table 28)		Separate values for calendar day vs working or completion date?		
	Yes	No	Yes	No	NA
Chicago	X				X
Cincinnati	X			X	
Dallas	X				X
Detroit	X				X
El Paso	X				X
Honolulu	X				X
Los Angeles	X				X
Louisville	X				X
Milwaukee	X			X	
San Francisco	X				X
Seattle	X				X
Tampa	X				X
Tulsa	X			X	
U. S. BLM	X				X
U. S. Navy	X				X
AIA		X			

How quickly must the contractor respond to notice of inadequate maintenance of project? (Summarized in Table 29)

	Immediately	24 Hours	48 Hours	No Mention	Other
Chicago				X	
Cincinnati				X	
Dallas				X	
Detroit				X	
El Paso				X	
Honolulu				X	
Los Angeles				X	
Louisville				X	
Milwaukee				X	
San Francisco				X	
Seattle				X	
Tampa			X		
Tulsa		X			
U. S. BLM				X	
U. S. Navy				X	
AIA				X	

Can the agency terminate the contract for convenience? (Summarized in Table 30)

	Yes	No
Chicago		X
Cincinnati	X	
Dallas	X	
Detroit	X	
El Paso		X
Honolulu	X	
Los Angeles	X	
Louisville		X
Milwaukee	X	
San Francisco	X	
Seattle	X	
Tampa	X	
Tulsa	X	
U. S. BLM	X	
U. S. Navy	X	
AIA		X

How long does the contractor have to respond to/or correct deficiencies prior to agency terminating contract? (Summarized in Table 31)

	___ day notice to Contractor	No notice periord stated
Chicago	10	
Cincinnati	10	
Dallas	15	
Detroit	2	
El Paso	10	
Honolulu	7	
Los Angeles		X
Louisville		X
Milwaukee		X
San Francisco	24 HRS	
Seattle		X
Tampa		X
Tulsa	10	
U. S. BLM		X
U. S. Navy		X
AIA	14	

How long does the surety have to take over work prior to agency performing or having work perfromed by others? (Summarized in Table 32)

	___ day notice to surity	No notice periord stated
Chicago		X
Cincinnati	10	
Dallas	15	
Detroit		X
El Paso	10	
Honolulu		X
Los Angeles	5	
Louisville		X
Milwaukee	10	
San Francisco		X
Seattle		X
Tampa		X
Tulsa		X
U. S. BLM		X
U. S. Navy		X
AIA		X

How often are progress payments made? (Summarized in Table 33)

	Monthly	Twice Monthly	Bi-Weekly	Other
Chicago	X			
Cincinnati	X			
Dallas	X			
Detroit				NO MENTION
El Paso	X			
Honolulu	X			
Los Angeles	X			
Louisville	X			
Milwaukee				FROM TIME TO TIME
San Francisco	X			
Seattle	X			
Tampa	X			
Tulsa	X			
U. S. BLM	X			
U. S. Navy	X			
AIA				PER AGREEMENT

XI. APPENDIX C

STATE OF GEORGIA

DISPUTES RESOLUTION PROVISIONS

DEPARTMENT OF TRANSPORTATION
State of Georgia

SUPPLEMENTAL SPECIFICATION

Modification of the Standard Specifications

SECTION 105 - CONTROL OF WORK

Retain as written except as follows: Delete Sub-Section 105.13 in it's entirety and substitute the following:

105.13 CLAIMS FOR ADJUSTMENTS AND DISPUTES: Whenever the Contractor believes that it is or will be entitled to additional compensation, whether due to delay, extra work, breach of contract, or other causes, the Contractor shall follow the procedures set forth in this Sub-Section.

A. CLAIMS FOR DELAY:

1. The Department shall have no liability for damages due to delay, beyond those items which are specifically payable under this Sub-Section.

2. . The Department will be liable only for those delay damages caused by or arising from acts or omissions on the part of the Department which violate legal or contractual duties owed to the Contractor by the Department. The Contractor assumes the risk of damages from all other causes of delay.

3. The parties anticipate delays caused by or arising from right of way problems, defects in plans or design, redesign, changes in the Work by the Department, the actions of suppliers or other contractors, the shop-drawing approval process, injunctions, court orders and other such events, forces or factors commonly experienced in highway construction work. Such delays are specifically contemplated by the parties in entering this Contract, and shall not constitute breaches of the Contract. However, such delays may constitute a basis for a claim for delay damages, if found to be in accordance with Sub-Section 105.13.A.2 above and other provisions of the Contract, and/or a request for a time extension.

4. The term "delay" shall be deemed to mean any event, action, force or factor which extends the Contractor's time of performance. This Sub-Section is intended to cover all such events, actions, forces or factors, whether they be styled "delay", "disruption", "interference", "impedance", "hindrance" or otherwise.

5. Compliance with the provisions of this Sub-Section will be an essential condition precedent to any recovery of delay damages by the Contractor.

6. The following items, and only the following items, will be recoverable by the Contractor as "delay damages" caused by a delay:

a. Additional job site labor expenses.

b. Documented additional costs for materials.

c. Equipment costs, as determined in accordance with this Sub-Section.

d. Documented costs of extended job-site overhead.

e. An additional 10 percent of the total of items a, b, c, and d for home office overhead and profit.

f. Bond costs.

g. Subcontractor costs, as determined by, and limited to, those items identified as payable under paragraphs a, b, c, d, e, and f above.

7. For purposes of computing extra equipment costs, rates used shall be based on the Contractor's actual experienced cost for each piece of equipment. These rates must be supported by equipment cost records furnished by the Contractor. In no case will equipment rates be allowed in excess of those determined utilizing the "Rental Rate Blue Book", with the appropriate adjustments noted in Sub-Section 109.05.

8. The parties agree that, in any claim for delay damages, the Department will have no liability for the following items of damages or expense:

a. Profit, in excess of that provided herein.

b. Loss of profit.

c. Labor inefficiencies.

d. Home office overhead in excess of that provided herein.

e. Consequential damages, including but not limited to loss of bonding capacity, loss of bidding opportunities and insolvency.

f. Indirect costs or expenses of any nature.

g. Attorneys fees, claims preparation expenses or costs of litigation.

9. Within one week after determining that a delay has occurred, the Contractor must give the Department written notice of its intention to file a claim for delay damages. Such notice must be given in order that the Department can:

a. Assess the situation.

b. Make an initial determination as to who is responsible for causing the delay.

c. Institute appropriate changes or procedures to resolve the matter.

The Department shall have no liability for any delay damages which accrued more than one week prior to the filing of such notice. Failure of the Contractor to give such written notice in a timely fashion will be grounds for denial of the claim.

10. After giving the Department notice of intention to file a claim for delay damages, the Contractor must keep daily records of all labor, material, and equipment costs incurred for operations affected by the delay. These daily records must identify each operation affected by the delay and the specific locations where work is affected by the delay. The Department will also keep records of all labor, material, and equipment used on operations affected by the delay. On Monday, or the first work day, of each week following the date of giving notice of intention to file claim for delay damages, the Contractor shall meet with the Department's representative and present the daily records for the preceding week. If the Contractor's records indicate costs greater than those kept by the Department, the Department will present its records to the Contractor. The Contractor shall notify the Engineer within three (3) work days of any inaccuracies noted in, or disagreements with, the Department's records. Refusal or repeated failure by the Contractor to attend these weekly meetings and present its records will constitute a waiver by the Contractor of any objections as to the accuracy of the Department's records. When the Contractor makes an objection as to the accuracy of the Department's records, the Engineer shall review the matter, and correct any inaccuracies he finds in the Department's records. For purposes of computing delay damages, the Department's records will control.

In the event the Contractor wishes to contest the accuracy of the Department's records, it may file a petition pursuant to Rule 672-1-.05 of the Official Rules and Regulations of the Department of Transportation. The decision of the Engineer, or, if contested, the decision of the Agency, will be final and binding upon the parties as to any objections to the accuracy of the Department's records, subject to the Contractor's right to judicial review under O.C.G.A. Section 50-13-19.

11. On a weekly basis after giving notice of intention to file a claim for delay damages, the Contractor shall prepare and submit to the Engineer written reports providing the following information:

a. Potential effect to the schedule caused by the delay.

b. Identification of all operations that have been delayed, or are to be delayed.

c. Explanation of how the Department's act or omission delayed each operation, and estimation of how much time is required to complete the project.

d. Itemization of all extra costs being incurred, including:

(1) An explanation as to how those extra costs relate to the delay and how they are being calculated and measured.

(2) Identification of all project employees for whom costs are being compiled.

(3) Identification of all manufacturer's numbers of all items of equipment for which costs are being compiled.

B. CLAIMS FOR ACCELERATION:

The Department shall have no liability for any constructive acceleration. If the Department gives express written direction for the Contractor to accelerate its effort, then both parties shall execute a Supplemental Agreement as provided in Sub-Section 104.03.

C. OTHER CLAIMS:

1. In any case in which the Contractor believes that it will be entitled to additional compensation for reasons other than delay or acceleration, the Contractor shall notify the Engineer in writing of its intent to claim such additional compensation before beginning or proceeding further with the Work out of which such claim arises. If such notification is not given, then the Contractor hereby agrees that it shall have waived any additional compensation for that work and the Contractor shall have no claim thereto.

2. The liability of the Department for such claims shall be limited to those items of damages which are specifically identified as payable in connection with delay claims as set forth in Sub-Section 105.13.A.6. For such claims, the Department will have no liability for those items of damages identified as not payable in connection with delay claims as set forth in Sub-Section 105.13.A.8.

D. REQUIRED CONTENTS OF CLAIMS: All claims must be submitted in writing, and must be sufficient in detail to enable the Engineer to ascertain the basis and the amount of each claim. All information submitted to the Department under this Sub-Section will be used solely for analyzing and/or resolving the claim. At a minimum, the following information must be provided:

1. FOR DELAY CLAIMS:

a. A description of the operations that were delayed, the reasons for the delay, how they were delayed, including the report of all scheduling experts or other consultants, if any.

b. An as-built chart, CPM scheme or other diagram depicting in graphic form how the operations were adversely affected.

c. The date on which actions resulting in the claim occurred or conditions resulting in the claim became evident.

d. A copy of the "Notice of Potential Claim" filed for the specific claim by the Contractor.

e. The name, function, and activity of each Department official, or employee, involved in, or knowledgeable about facts that gave rise to such claim.

f. The name, function, and activity of each Contractor or Subcontractor official, or employee, involved in, or knowledgeable about facts that gave rise to such claim.

g. The identification of any pertinent documents, and the substance of any material oral communication relating to such claim.

h. A statement as to whether the additional compensation or extension of time sought is based on the provisions of the Contract or an alleged breach of Contract.

i. The amount of additional compensation sought and a break-down of that amount into the categories specified as payable under Sub-Section 105.13.A.6. above.

j. If an extension of time is also sought, the specific days for which it is sought and the basis for such request.

2. FOR OTHER CLAIMS:

a. A detailed factual statement of the claim providing all necessary dates, locations and items of work affected by the claim.

b. The date on which actions resulting in the claim occurred or conditions resulting in the claim became evident.

c. A copy of the "Notice of Potential Claim" filed for the specific claim by the Contractor pursuant to this Sub-Section.

d. The name, function, and activity of each Department official, or employee, involved in, or knowledgeable about facts that gave rise to such claim.

e. The name, function, and activity of each Contractor or Subcontractor official, or employee, involved in, or knowledgeable about facts that gave rise to such claim.

f. The specific provisions of the Contract which support the claim, and a statement of the reasons why such provisions support the claim.

g. The identification of any pertinent documents, and the substance of any material oral communications relating to such claim.

h. A statement as to whether the additional compensation or extension of time sought is based on the provisions of the Contract or an alleged breach of Contract.

i. If an extension of time is also sought, the specific days for which it is sought and the basis for such claim as determined by an analysis of the construction schedule.

j. The amount of additional compensation sought and a breakdown of that amount into the categories specified as payable under Sub-Section 105.13.A.6. above.

E. REQUIRED CERTIFICATION OF CLAIMS: When submitting the claim, the Contractor must certify in writing, under oath in accordance with the formalities required by Georgia law, as to the following:

1. That the claim is made in good faith.

2. That supportive data are accurate and complete to the Contractor's best knowledge and belief.

3. That the amount of the claim accurately reflects what the Contractor in good faith believes to be the Department's liability.

The Contractor shall use the CERTIFICATE OF CLAIM form, which can be obtained from the Department, in complying with these requirements.

F. AUDITING OF CLAIMS: All claims filed against the Department shall be subject to audit at any time following the filing of such claim, whether or not such claim is part of a suit pending in the courts of this State. The audit may be performed by employees of the Department or by an independent auditor appointed by the Department. The audit may begin on ten days notice to the Contractor, Subcontractor, or Supplier. The Contractor, Subcontractor, or Supplier shall make a good faith effort to cooperate with the auditors. Failure of the

Contractor, Subcontractor, or Supplier to maintain and retain sufficient records to allow the Department's auditor to verify the claim shall constitute a waiver of that portion of such claim that cannot be verified and shall bar recover thereunder.

Without limiting the generality of the foregoing, and as a minimum, the auditors shall have available to them the following documents:

1. Daily time sheets and foreman's daily reports.

2. Union agreements, if any.

3. Insurance, welfare, and benefits records.

4. Payroll register.

5. Earnings records.

6. Payroll tax returns.

7. Material invoices, purchase orders, and all material and supply acquisition contracts.

8. Material cost distribution worksheet.

9. Equipment records (list of company equipment, rates, etc.)

10. Vendor rental agreements, and subcontractor invoices.

11. Subcontractor payment certificates.

12. Cancelled checks (payroll and vendors).

13. Job cost report.

14. Job payroll ledger.

15. General ledger, general journal, (if used) and all subsidiary ledgers and journals together with all supporting documentation pertinent to entries made in these ledgers and journals.

16. Cash Disbursements journal.

17. Financial statements for all years reflecting the operations on this project.

18. Income tax returns for all years reflecting the operations on this project.

19. Depreciation records on all company equipment whether such records are maintained by the company involved, its accountant, or others.

20. If a source other than depreciation records is used to develop costs for the Contractor's internal purposes in establishing the actual cost of owning and operating equipment, all such other source documents.

21. All documents which reflect the Contractor's actual profit and overhead during the years this Project was being performed and for each of the five years prior to the commencement of this Project.

22. All documents related to the preparation of the Contractor's bid including the final calculations on which the bid was based unless such documents are placed in escrow under other provisions of the Contract.

23. All documents which relate to each and every claim together with all documents which support the amount of damages as to each claim.

24. Worksheets used to prepare the claim establishing the cost components for items of the claim including, but not limited to, labor, benefits and insurance, materials, equipment, subcontractors, and all documents which establish the time periods, individuals involved, the hours and the rates for the individuals.

G. REMEDIES EXCLUSIVE: The parties agree that the Department shall have no liability to the Contractor for expenses, costs, or items of damage other than those which are specifically identified as payable under this Sub-Section. In the event any legal action is instituted against the Department by the Contractor on account of any claim for additional compensation, whether on account of delay, acceleration, breach of contract, or otherwise, the Contractor agrees that the Department's liability will be limited to those items which are specifically identified as payable in this Sub-Section.

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